A WINDOW OPEN ON THE WORLD

The UNESCO Courier

UNITED NATIONS EDUCATIONAL SCIENTIFIC AND CULTURAL ORGANIZATION

JULY
1955
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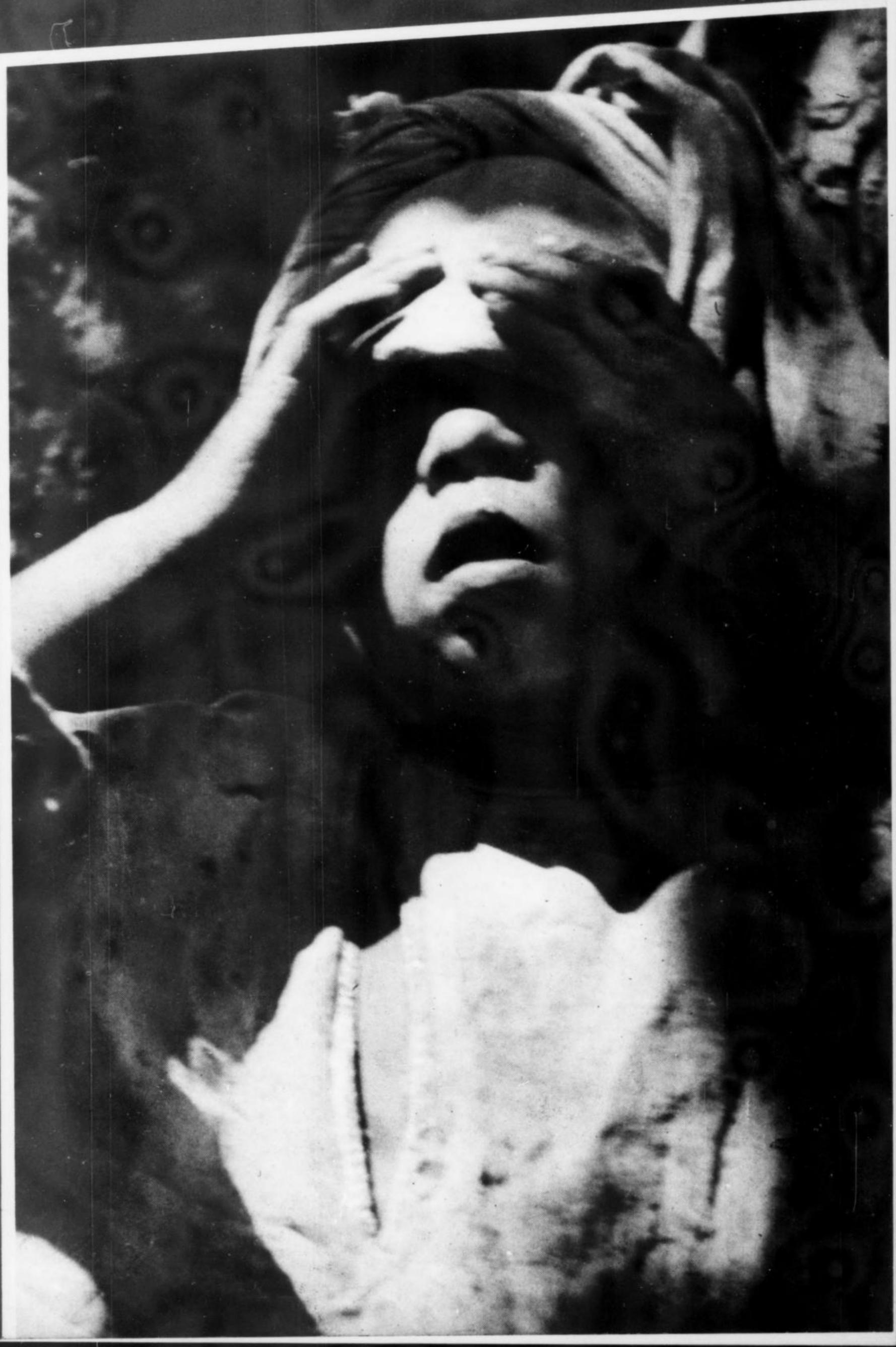
In this issue

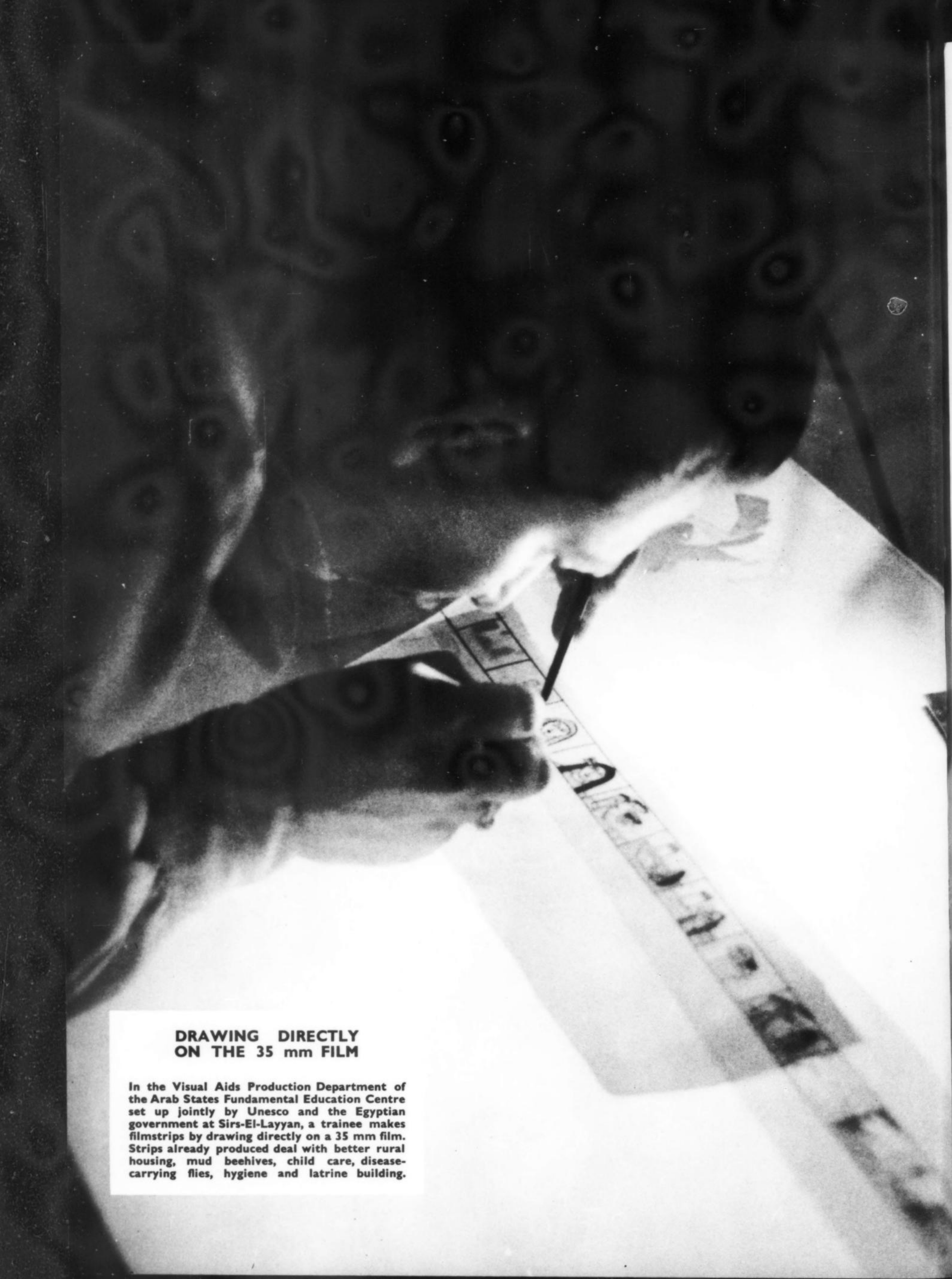
3,000 YR. OLD LANGUAGE MYSTERY SOLVED

GOOD HEALTH, A WORLD THREAT?

GHOST VILLAGE COMES TO LIFE

PROBLEMS OF AN ARAB VILLAGE





DRAWING DIRECTLY ON THE 35 mm FILM

In the Visual Aids Production Department of the Arab States Fundamental Education Centre set up jointly by Unesco and the Egyptian government at Sirs-El-Layyan, a trainee makes filmstrips by drawing directly on a 35 mm film. Strips already produced deal with better rural housing, mud beehives, child care, disease-carrying flies, hygiene and latrine building.

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I CAN HARDLY SEE! Some thirty miles from Cairo, Unesco has created a Fundamental Education Centre for the Arab world. Here, teachers are learning to meet problems of education, health, farming and vocational training awaiting them in their home countries. Photo shows boy victim of trachoma, the crippling eye disease, one of health problems dealt with at Sirs el Layyan. In Egypt alone trachoma afflicts about half the population.

THE aim of all education is to help men and women to live fuller and happier lives in adjustment with their changing environment, to develop the best elements in their own way of life, and to achieve the social and economic progress which will enable them to take their place in the modern world and live together in peace.

Throughout the world a major war is being waged today—the war against ignorance. Since it is waged with peaceful weapons, it receives relatively small notice. A frontier incident produced by an accidental rifle shot produces more columns of news than the opening of a new training school for teachers. But this struggle for knowledge is one of the great stories of our time. Men are beginning to realize that no machinery they may set up to preserve peace can work in a world where more than half of the population lives in misery and ignorance.

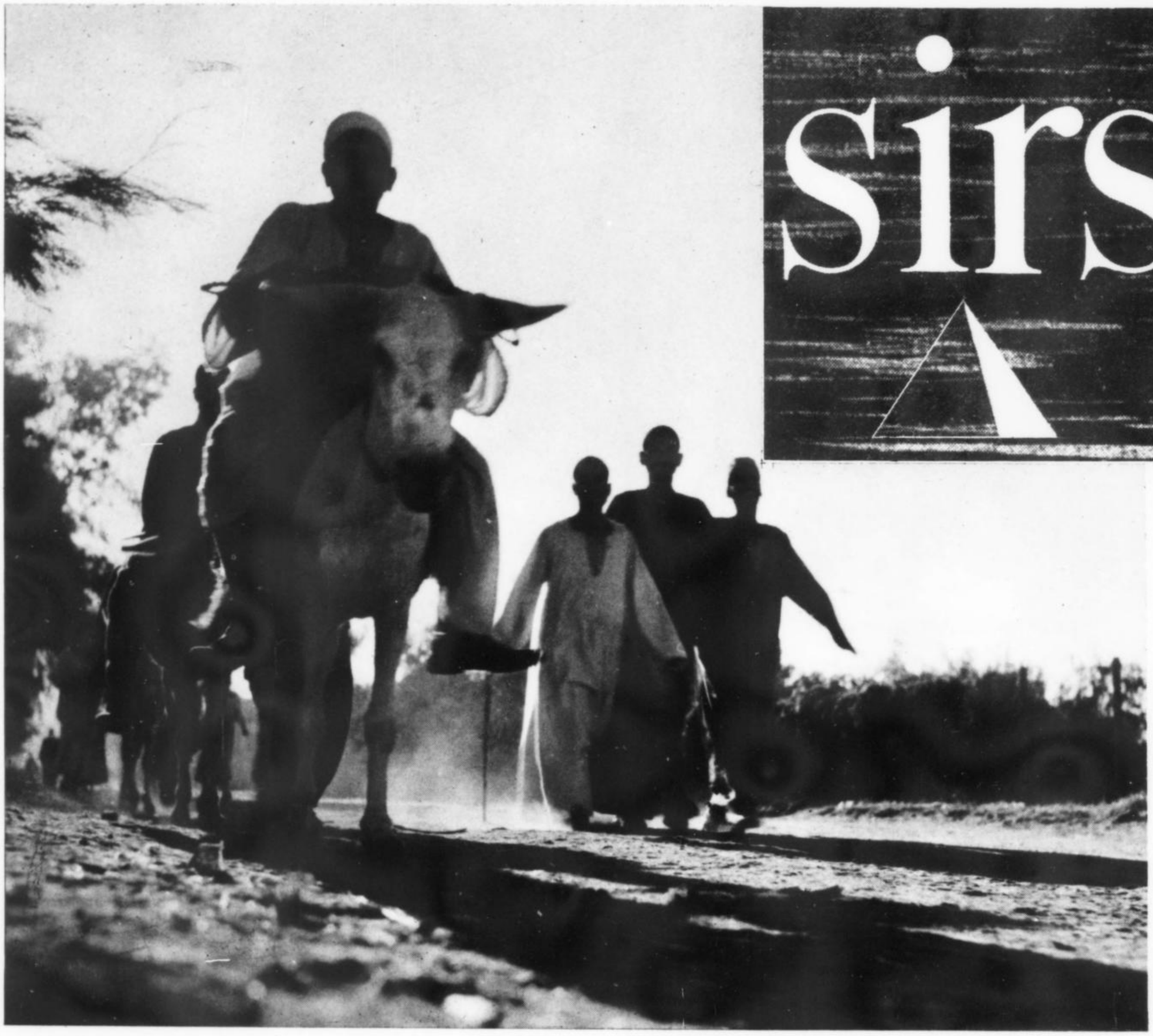
More than half the people of the world live in ignorance. It seems so easy to say it and then turn to something else. But it means that one billion two hundred thousand people can neither read nor write and are desperately poor. All of them live in backward, even primitive conditions and lack the knowledge and the means to improve their lot.

Under-developed countries are finding it more and more difficult to meet the ever-growing demand for education by themselves. In the past decade, however, great world agencies of the United Nations have been at work to help these countries improve the health of their peoples, to increase food production, to protect and improve labour conditions, and to bring the benefits of education and science to all who are in need of them.

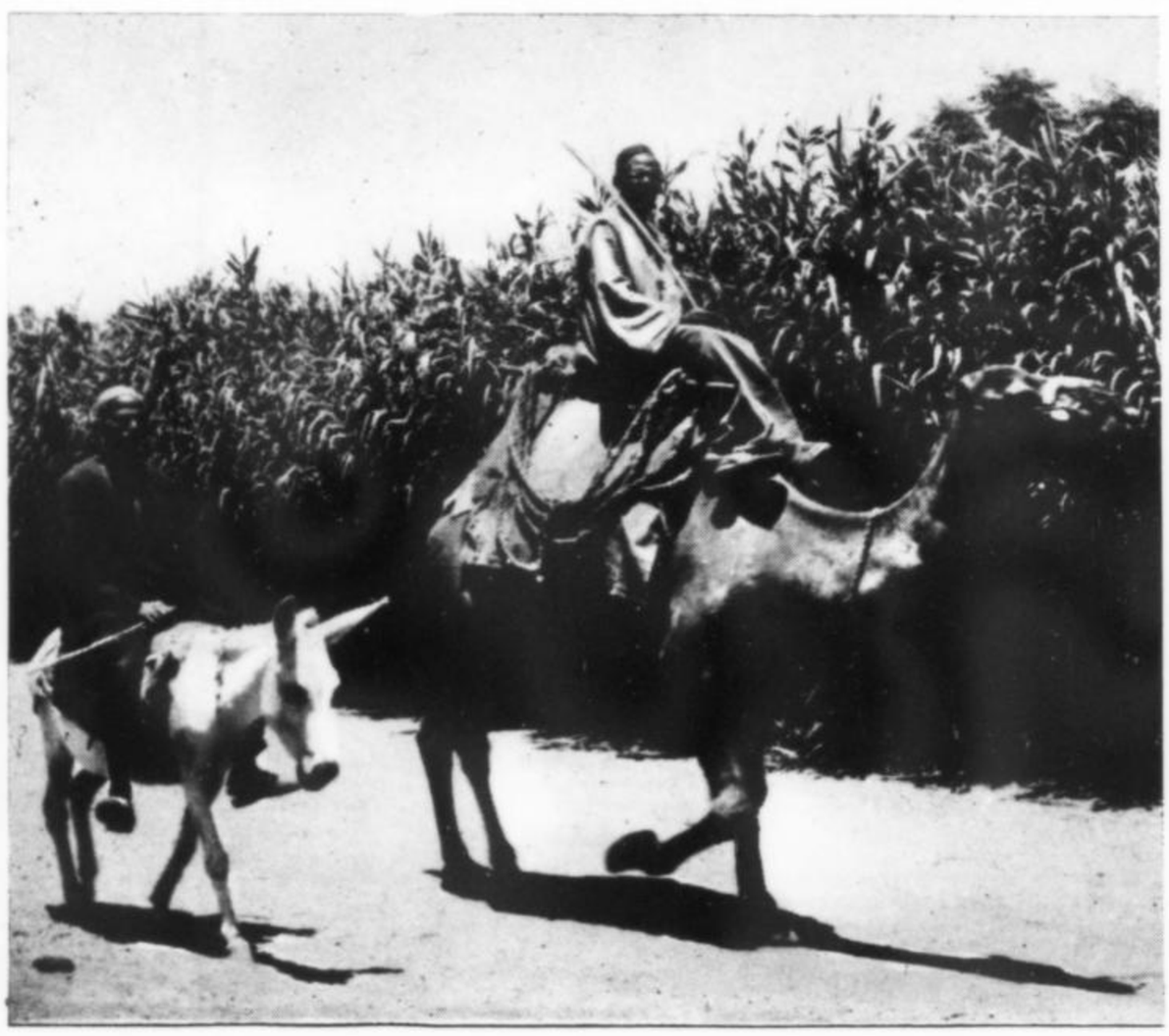
Unesco, which now counts 72 nations among its membership, has sent top-notch educational missions to advise and help governments in need, it has undertaken experimental pilot projects of its own, it has convened international seminars of educators to thrash out specific problems, and provided for international fellowships. It has set up a world-wide link among over 50 associated educational projects carried out by privately-endowed or government-financed institutions and today acts as a great international channel for the free flow of knowledge and information in the educational field.

Unesco now operates two regional training centres for educational leaders: the Patzcuaro Fundamental Education Centre in Mexico and the Sirs-El-Layyan centre for Arab States in Egypt. Unesco is assisting national projects in countries such as Cambodia, Ceylon, Iraq, Liberia, Libya, Somaliland, Thailand and Venezuela. In Thailand, the Unesco-Thailand Fundamental Education Centre at Ubol has now been accorded the status of a national training institution for educational leaders. Similar projects carried out under Unesco's auspices in Iraq, Ceylon and Liberia have grown from small experimental ventures to important national ones in the short space of a few years.

For a long time to come the economically under-developed areas within each country must rely upon trained personnel and material resources from more fortunate communities both within their own countries and abroad. But the need for this support will not be fully satisfied unless fundamental education is recognized as a matter of urgency and world-wide concern, and until its scope, purposes and methods become more generally understood. Unesco, national governments and national commissions for Unesco have united in campaigns to bring the facts before the people of every nation. And through programmes of common action such as the Unesco Gift Coupon Plan a direct way has been found for individuals and groups to learn of and take part personally in the work of the United Nations and Unesco. The wide support all of these methods are receiving is going a long way, in the words of the U.N. Charter, to "promote social progress and better standards of life in larger freedom."



THESE ARE THE EGYPTIAN FELLAHIN—A WORD THAT TO THE WORLD SUGGESTS HUMILITY AND POVERTY, BUT IN FACT MEANS SIMPLY " FARMERS ".



sellayan

by Georges Fradier

HERE, the earth has no respite. No sooner is the harvest gathered than the fields are ploughed and, at the same time, sown; year in year out, each acre yields cereals, then fodder, and then cotton. It is the land where the fields are ever green—the Nile delta, which for 5,000 years has produced the finest crops in the world.

Nor have the peasants any easier lot. Regularly, at the appointed hour, they must irrigate the fields : the water must be pumped, directed into a complex network of cuts, and distributed; every inch of ground must be flooded for just the necessary length of time; the channels must be filled up and then opened again. The men never part from their *fas,* the proverbial hoe so often depicted by the Pharaonic painters in their frescoes ; it is an all-purpose tool, almost the only tool they have.

All day long they dig, weed, cart compost, clean the canals and, waist-deep in water, work the Archimedean screws, or toil at the ancient swing-plough which has no wheel or mould-board, or work on their knees in the rich mud that they seem almost to be modelling into a fetish. Men of the earth indeed, they are wedded to the soil. They are the fellahin—a word that to the world suggests humility and poverty, but in fact means simply "farmers".

The women, too, work in the fields ; they look after the poultry, cows and black water-buffaloes ; they mould the slabs of cow-dung, the only form of fuel ; they go to market to sell eggs, fowls and vegetables, all packed into big bundles that they carry on their heads ; and as travellers say, they walk like goddesses, head erect, until they die. They prepare the evening meal and make bread, but cooking is the least of their burdens. The children, boys and girls alike, also have their set tasks ; at the age of 10 they are already experienced workers.

Little importance is attached to villages and houses. Land is far too dear for the people to be able to build comfortably on it. Only the mosque and the church are relatively spacious. The little dried-mud houses, huddled together, have two or three dark rooms shared by people and animals alike. They are furnished with a marriage chest, a few bowls, and perhaps a mat or two—nothing more. In winter, the occupants sleep on the clay stove.

In this province, known as Menufia, there are more than 740 inhabitants to the square kilometre. The town of Menuf, 45 miles distant from Cairo, has over 60,000 inhabitants, but is smaller than the Park of Versailles. "Little villages" here may have five or ten thousand inhabitants ; the fellahin do not take up much space.

From a distance these villages are a beautiful sight, nestling on the banks of a canal or pool, or in the fields under giant palms and eucalyptuses. The little houses, too, which line the smelly, unbearably dusty alley-ways, are often pleasingly built ; and some visitors admire the rough frescoes—representing a train, the sea, a steamer, or famous monuments —which pilgrims returning from Jerusalem or Mecca paint on the front of their homes. Many of these houses are indeed more attractive than the square cement buildings of the capital ; yet the visitor wonders how anyone could possibly live in them.

The fact remains that people do live—and die—in these dwellings with their mud floors. For the fellahin, the earth is never dirty—it is the earth. Likewise, for them, the water is never impure ; it is the sacred, life-giving water of the Nile ; if it were too clean and too well-filtered, many people would think it lifeless and useless.

But life is perhaps not long in these surroundings ; few old folk are about in the villages ; that toothless, wrinkled, spent old woman in the street may not have seen 60. All the same, the fellahin are rightly renowned for their strength and toughness, their muscular arms and broad shoulders —as are the girls for their supple sturdiness. There has been no degeneration in the race, it is said, since the epoch of the Pyramids.

It might be said that their faces, too, are still as handsome ; but trachoma has too often overlaid their deep-set brown or black eyes with a whitish stain, or the eyelids are covered with pus. Whether of native stock or Arab origin, the Egyptians have always lived frugally ; but today they are stalked by hunger. Of all the crops they grow they only keep some wheat or maize for making bread, some beans for making soup, and a few vegetables to eat raw. They work the same soil as their forbears, with the same tools, though their crops are worth more because of the cotton—thousands of acres, cared for like "gardens". But land seems harder and harder to come by.

For this is the vital fact : Seven or eight million men are working on the land in Egypt, and at least three million of them own the land they work. But most of them own less than a *feddan* (some one and a quarter acres), while the country's population has doubled in 40 years, the area of land under cultivation has only increased by one quarter.

These tireless workers, these sturdy fellahin, are all sick men. Ninety-two per cent of them suffer from bilharziasis, a disease caused by a microscopic worm which is peculiar to swampy land or irrigation channels. The worm breeds in the snails which abound in the irrigation cuts where men work, children bathe and women draw drinking-water. It penetrates the skin of human beings and circulates through the body, lodging in the intestines or bladder and eating them away. A vicious circle is set up : the infection leaves the body with the excrement, which goes into the irrigation canals, where the snails are waiting. And so on. Ninety-two per cent !

And besides endemic diseases there are other scourges. Of cholera there have been only sporadic outbursts since the 1948 epidemic, but the threat is ever present. Malaria seems

Sirs-el-Layyan (Cont'd)

Fellahin : 'nothing good comes from city folk'

Feluccas on the Nile

The Great Nile—3,900 miles long from Lake Victoria to the Mediterranean—is Egypt's commercial highway and its source of life. The yearly flood of the Nile has for centuries been the secret of Egypt's fertility. The heavy April rains in the basin of the White Nile in Central Africa start the first flood and the May rains in Ethiopia give the real flood of rich muddy water that fertilizes as well as irrigates. The great dam at Aswan stores up the surplus flood and releases it later on, to water the Nile Valley all the year round. (Unesco photos)

now to be under control, as a result of the introduction of DDT as a prophylactic. (The last epidemic, in 1946, is thought to have cost a million lives.) Tuberculosis, however, is rife ; the Ministry of Health records 55,000 deaths from it every year, which means that some 500,000 people must be suffering from the disease, in its active or arrested form, and that the annual death-rate from it is about 200 per 100,000 inhabitants. In France the corresponding figure is 42, in Denmark eight.

It should be added that in Egypt, as in many Middle Eastern countries, infantile mortality amounts to over 65 per cent in the first five years. Trachoma afflicts about half the population, or even more, for the primary stage often escapes diagnosis. Sufferers will not consult the doctor for "mere conjunctivitis".

But when such economic conditions are combined with lack of hygiene and over-population, it is not easy to find solutions which go to the root of the trouble. We cannot in this instance say "the Government need only do so and so" ; Egypt's official social services are exemplary in their scope and good sense.

But what can in fact be done, not to bring about miraculous reforms, but simply to help these people to lead lives that are less hard and less narrow? And, after that, how can they be brought to share in the economic, technical, political and cultural exchanges which are the currency of modern civilization? How can we turn this inarticulate people into a body of citizens enjoying full rights? These are the questions facing the hundred members of the Sirs-el-Layyan fundamental education centre today.

Sirs-el-Layyan, in the Menufia district, is a large straggling village where, in 1952, the Egyptian Government and Unesco, with the help of other United Nations Specialized Agencies, opened a training-centre for the men and women who will be in charge of fundamental education in the Arab countries. It is thus not an institution working for merely local progress and the benefit of the Egyptian fellahin alone. Candidates come to it from nine countries—Egypt, Iraq, Hashemite Kingdom of Jordan, Lebanon, Libya, Palestine (Arab refugees), Saudi-Arabia, Syria and Yemen.

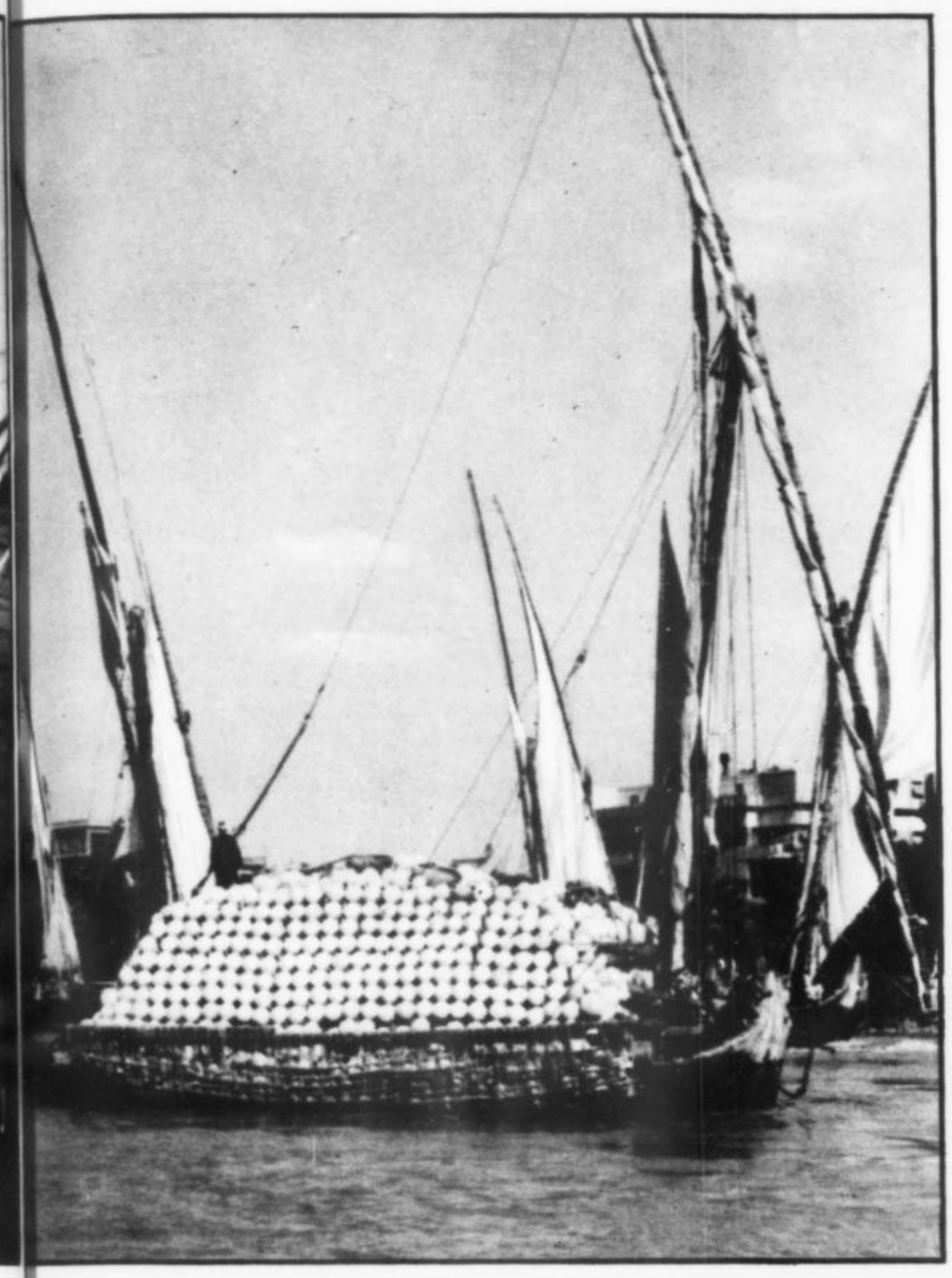
They are there to prepare themselves for the tasks awaiting them when they return to their homeland. But around Sirs-el-Layyan each member of the centre sees, basically, the same kind of peasant society that he has known in his own country. It is a form of society found—with, of course, many variations—throughout the Arab world. The Egyptian delta is, however, a particularly valuable field for experiment because of the density of its population. Within a radius of a few miles a hamlet, a small town and five or six villages may be studied at the same time—some of them quite flourishing, others completely poverty-stricken; some entirely Muslim, others with a Christian minority; some peopled by small farmers, others by day-labourers and workmen who own no land.

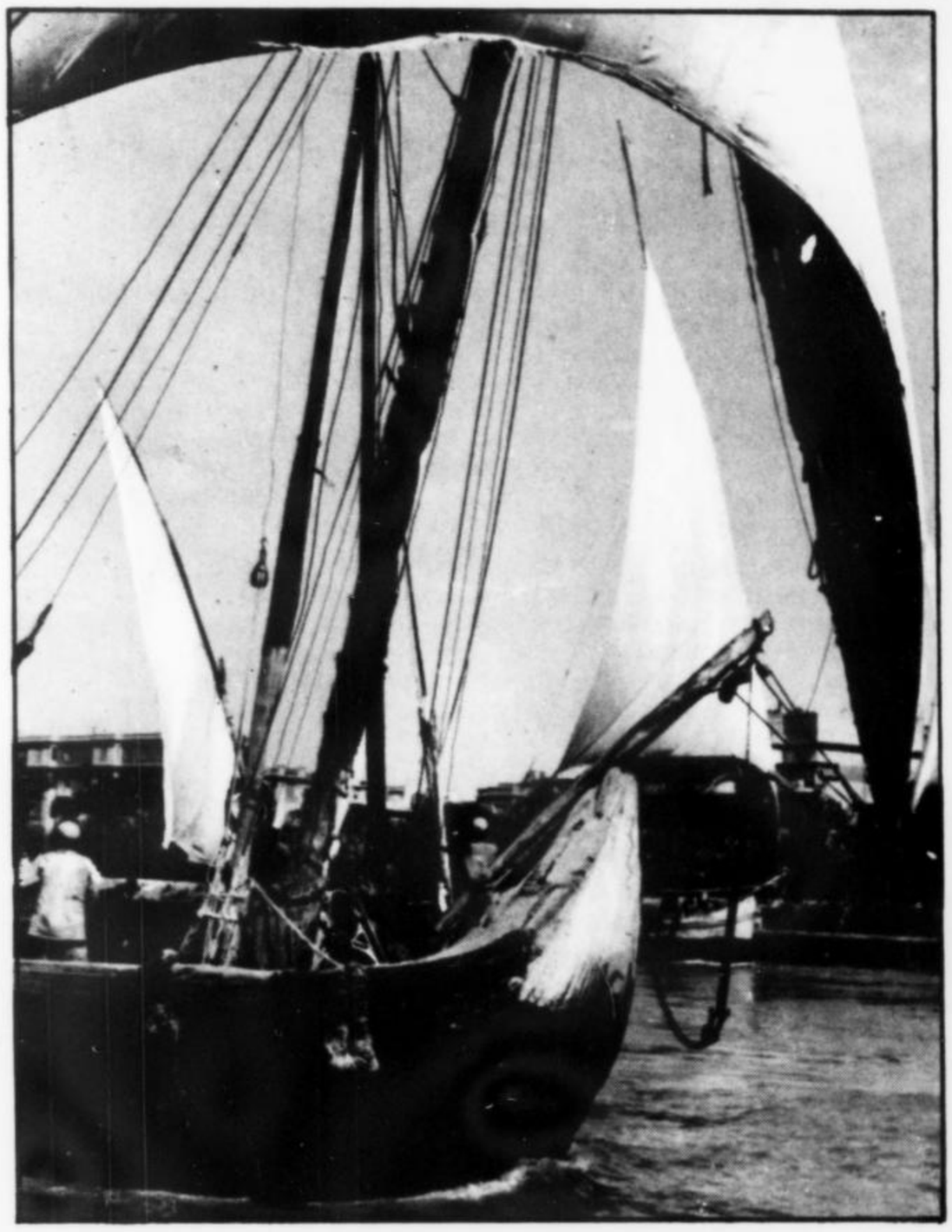
It was, moreover, in this district that the Egyptian Government a few years ago embarked on an educational and social service scheme which was to lead to a nation-wide enterprise for social and economic progress. The "social centres" found in several villages comprise dispensaries, maternity clinics and assembly rooms. Evening classes for illiterates have been started, health campaigns organized, and agricultural information offices opened; playgrounds have been provided for children, as well as garden plots for them to tend. Thus with the help of trained staff, and thanks to tried methods, as well as experiments (sometimes successful, sometimes a failure, but always providing a valuable lesson), the centre's work is greatly facilitated.

At all events, even though the surrounding villages are primarily the centre's "laboratories", the trainees know that their daily work must contribute to the people's welfare. If they fail here, what will they do later? The solutions they will have to apply then must be worked out now, on the spot.

Picture a team of 10 or 12 trainees of every nationality represented at the centre. In front of them is a village, which is to be *their* village for the next two years. They rent a house there, and at first visit it for one day a week (later they will live in it permanently); they are really face to face with the village, and for weeks will be looked upon as strangers, intruders, embarrassing and embarrassed.

They are not young students; their average age is 30. Some are university graduates, while others have already





started their careers as teachers, social workers, agricultural engineers, or nurses; there are specialists in adult education, in anti-epidemic work, or in education by visual aids. But at first they lose their self-confidence, and walk about like shy visitors.

The village with which they have to contend is an amorphous mass of men and women whose first instinct is to reject, to mistrust. The fellahin generally expect nothing good from the ladies and gentlemen of the towns. For centuries the city's only interest in them has been to send them masters, tax-collectors and police. It takes days and weeks of mutual observation, patient explanations and experience of working with others, before the students are accepted and their role understood. They have come to help the village a little. But what can be done without money? They are not going to build, or put in drinking-water, or dig a new irrigation canal, or distribute presents. And besides, what are their qualifications?

"We simply want to help you help yourselves." It is a good formula; but no amount of talking will make it understandable to the peasants, who have little faith in novelties and automatically run away from the idea of any new scheme.

The trainees look through their list (which they think they know by heart) of the needs of every village in the delta, needs that are doubtless those of every village in the East: economic reform, agriculture, hygiene, education. But where are they to begin, and how? Which men and women would it be best to approach first?

The trainees soon discover the ganglia, the nervous system as it were, of the mass. They identify the village "notables" —peasants more prosperous or better educated than the rest, influential and respected priests or religious teachers, or young people with a taste for progress and action. The Sirs-el-Layyan centre has now been operating for two years. If its efforts in the villages selected had to be described in a single sentence, it could be said that in every instance the trainees had achieved something unheard of: they have created true communities. Using a variety of tactics, they are gradually bringing into being an organized village life, by giving self-realization to groups of men with a civic conscience, potential "leaders" in a system which, based on service, is the nucleus of a local democracy.

Of course, to start a sewing-school or a dispensary and attract women and children to it, it "was enough" to gain the confidence of the village; it seemed quite a simple matter. But such confidence is not easily gained—quite the contrary. It is not the custom for women to go out at will except when going to work, or for them to meet apart from their families; they are afraid of ridicule, and normally do not dare to venture into a quarter other than their own; and as for girls, they are expected to remain shut up at home from the beginning of puberty until marriage.

These customs and conventions seemed immutable. Yet the young women trainees of the centre do not merely visit homes; because their own hostel is practically sacrosanct, they can, and regularly do, receive children, girls and married women there. The hostel at Deberki, for instance, is built on exactly the same lines as the rest of the village, mud walls, three rooms and a cattleshed under a single roof, a small closed court and a rickety staircase giving on to the roof-terrace. In other aspects, however, the difference leaps to the eye: the whole hostel is spotless and almost comfortable, and all at the price of no more than a little work, the aim being to show the villages by example that they too, without dipping into their pockets, can live in healthier and pleasanter houses. The lesson has driven itself home, and several families have built themselves well-ventilated, white-washed living-rooms, which are swept every morning.

Again, it was probably only necessary to win the trust of a few to persuade people that a "family" kitchen garden was possible and profitable. A few square metres set aside for vegetables and fruits to be eaten in the household and not marketed can have an influence on the children's diet out of all proportion to the expenses involved. Nor is Egypt the only country where we find peasant children wasting away for lack of vitamins.

However, the Sirs-el-Layyan centre by no means confines itself to such undertakings as these, where success depends upon calling forth a friendly feeling that might prove very ephemeral. In the same village of Deberki which, lying at the far end of the irrigation system, has the least fertile

Sirs-el-Layyan (Cont'd)

The 'Blind River' where girls steer the boats

farmlands of the region, 150 peasants have combined to form a co-operative, contributing from their scanty resources at rates ranging from 50 piastres for the poorest to £E5 for the richest; and they have bought a tractor. Now these people are cautious and suspicious in the extreme; they are usually terrified by the idea of the slightest form of "investment": being firmly convinced that money should be used only to buy land. To get them embarked on something as audacious as this, more than mere friendly advice was needed.

The centre's trainees had, in fact, to unearth in the village qualities of organization and initiative whose existence the villagers themselves had never suspected. The trainees did not form the co-operative; they merely helped it into being. They certainly argued, and most persuasively, the virtues of pooled work and explained the operation of combines on a share basis, but they never postulated the need of a tractor.

The village actually possessed potential leaders whose abilities were not being used; and it is these who now form the board of the co-operative, with its chairman, treasurer, secretary and so forth—men of all ages, meeting ceremoniously to discuss the crops to be sown, the maintenance of tractor and tools and the liquidation of the debt incurred in their purchase. They are men who, for the first time in their lives, feel that they are managing their future, running their own affairs and deliberating about them publicly, instead of merely suffering in silence and submitting to fate.

It may seem strange that, in writing about fundamental education, we have not yet spoken of actual teaching. It is generally admitted nowadays that "it is not enough to learn how to read" and that, in a peasant community, inability to write is merely one problem among many. Astonishment, however, is sometimes felt that educational work does not begin in a classroom; evening classes are an old institution, and history now records many well-known "literacy campaigns."

The trainees of Sirs-el-Layyan would reply that education can begin anywhere, as they prove in all sorts of ways—in a group gathered round a tractor, in connexion with a health campaign, or on an open-air stage. The main thing, they would always tell you, is that people should want to learn. Once that desire is expressed, no teaching, no form of education is really difficult. Evening courses are, generally speaking, an outcome rather than a starting-point. Once such courses have begun, at the request of the future pupils, education is already on the right road.

At Qalatta, the reading-classes would not have attracted many pupils had the trainees appeared at the outset in the guise of school-teachers. Qalatta is a charming village; it has plenty of trees, and lies on the bank of an ancient canal, wide as a river—the "blind river", as it is called, where white birds glide and little girls steer the boats.

For all its beauty of setting, however, Qalatta is one of the most neglected villages of the region. Land here is even scarcer and more broken up than in the neighbouring areas; on the plan, the farms look like a sprinkling of tiny gardens. The people of Qalatta, moreover, are famed for their feuds which are forever dividing man from man and setting districts, streets and families at odds. Possibly this is already a thing of the past, but at all events the village, two years ago, had an atmosphere charged with suspicion and

BETTER HOUSING for bees increased yield of honey more than tenfold in Menuf district of Egypt. Formerly only about 5-lbs of honey per year was obtained from the clay cylinder hives used by the fellahin. Specialists at Sirs-el-Layyan built a modern type with a bamboo framework covered with the traditional clay. New low-cost hives now give yields of between 50 and 70 pounds of honey. Experts at Sirs-el-Layyan now report that the fellahin "do everything with the tools at hand, making the hives themselves and constantly improving them." (Unesco photos)

ANCIENT WHEEL turned by yoked oxen is still used to pump water for irrigation in the Nile Delta. Irrigation systems are age-old and farming tools are of the most primitive kind, but the skill and labour of the fellahin have made this land one of the most productive in the world. (Unesco photo).

seemed doomed to chronic anarchy, mingled with apathy and dejection.

Yet it was at Qalatta, one evening in February 1954, that hundreds of peasants could be seen, queueing up in orderly fashion in front of the trainees' house. Adolescents, respectable citizens, grey-bearded grandfathers—all were illiterates waiting to enrol for the evening classes which were being organized at the village's request. One by one, they sat down before the table where the "literacy expert", Mr. Rushdi Khatir, examined them and entered them for the appropriate class. Some of them in fact knew nothing at all; others could sign their names; a third group could still display the elementary knowledge acquired, in the past, during a few months at school.

The last-comers waited patiently in the moonlight at the roadside, in the garden, or on the terrace overlooking the water. It was past midnight by the time the enrolment was completed; and there was an air of mystery about the scene, as if the occasion had been a meeting of conspirators or a gathering of volunteers. The fellahin may indeed have felt that they were taking an adventurous—or, at any rate, important—step in submitting their names for this initiation into the mysterious world of books.

In order to achieve this result, the students had worked with unfailing tact for over a year to put an end to the feuds which, hitherto, had defeated every good intention. No reforms could be effected in Qalatta before a spirit of comradeship and mutual trust had been re-created among the people and the value of co-operation demonstrated to them. The first step was to set up a club—to be operated, almost at once, by the villagers themselves.

During Ramadan the new club increased the number of its social evenings, calling for this purpose on all the talent of the village. Next a dispensary was organized, with two "attendants" trained by the students. The club was thrown open to the young people, who formed a special "cultural activities" section; and the officers, with the trainees' help, are now organizing a small public library.

The club, in effect, acts as a municipal council; on complaints from the village, last year, that there was a shortage of water for irrigation, it sent a delegation, accompanied by two trainees, to the Water Department. And when the engineer explained that the shortage was due to neglect of the canals in the Qalatta area, it was once again the club, at its regular meetings and at the mosque on Fridays, which campaigned for a general labour service. The canals were duly cleaned and, the following season, the water supply was so plentiful that irrigation was ensured with unexpected ease. Co-operation had proved its worth.

Today the people of Qalatta, like those of Deberki and other villages, are learning to read and write. Twice or three times a week they go to the club or the village school and pore patiently over their spelling primers or plough through their first books; the methods and books they use are prepared for them by the experts at Sirs-el-Layyan, and are thoroughly up to date. That they make this effort at the close of a long day's work shows that they want to make it and know what they want. For them, elementary education is not an end in itself; in the old days, they still regarded it as an unnecessary luxury, or perhaps as a means of becoming a police constable. Now they see that it can bring them definite advantages.

One man wants to read so that he shall know the Koran better; another, so that he can examine his bills and tax forms. The majority want to have access to the practical knowledge provided by the pamphlets and books already displayed in their meeting-rooms—manuals on agriculture, co-operative farming or odd-jobbing, and illustrated pamphlets on hygiene, cattle diseases or cotton pests. This mine of valuable information is there, within reach; and each peasant feels that he will be able to take full advantage of it just as soon as he has completed the course he is conscientiously following.

"Everything hangs together", said one of the trainees. "When we set out to raise the standard of living a little, each step leads to another... but then the result depends on a third factor, which was not reckoned with." What goes by the name of poverty, in the villages, is not a superficial

Sirs-el-Layyan (Cont'd)

A TIMELESS FEATURE of the Middle East scene is a shepherd and his flock on their way to new pastures. In addition to rearing sheep for their meat and wool, farmers in the district of Menufia—site of the Sirs-el-Layyan Centre—use ewe's milk to make a cheese which is reputed throughout Egypt. Local producers have now received certificates of quality from the Centre.

condition arising from a single simple cause which can be dealt with at one stroke. It is due to a whole tangle of causes, almost impossible to root out one by one.

Hundreds of children fall victims to an epidemic. Why? Because the mothers have no notion of hygiene? Probably—because there were no schools for them, and there are still all too few for their daughters. But there are other reasons too: polluted water (and who is going to pay for a public water-system?) and, above all, insanitary housing. Homes are insanitary because the fellahin have only the vaguest notions of what a proper, healthy house is. We must teach them, if we can. But whether they are taught or not, the fact remains that the fellahin lack the wherewithal to build better houses.

This argument seems decisive; in fact it is not entirely valid. In these villages and towns, every street, every square looks the same as it has looked for centuries past—yet no house is more than 20 years old. Everything built falls to pieces after 20 years, and the fellahin rebuild it at great expense. What happens is that the foundations rot away; if the brick foundations could be reinforced, every fellah would have at least one less house to build in his lifetime, and could thus enlarge and improve his home without spending more than he does at present. An expert from Yugoslavia is investigating this question at Sirs-el-Layyan, and has reasonable hopes of being able to introduce a cheap type of concrete which would revolutionize peasant housing.

The same expert is co-operating with the trainees to produce a new stove—a simple clay model designed to be much more effective and economical than the traditional type. This may seem a trivial matter; but if their stoves consumed less fuel, the latter could be supplied exclusively from wood, branches and twigs, and straw. The cattle-dung could then be used as manure. The invention of a good stove may, one day, spare them this vast expenditure of time and labour.

One fellah admitted as much, when he smilingly said: "It's better to save your strength when you haven't enough to eat." It is shameful that such skilled and hardworking farmers should have to feed themselves and their families so badly. Apart from raw vegetables, the fellahin eat practically nothing but bread, beans and a little cheese. If they raise poultry, they do so for sale, and they themselves only eat eggs on special occasions: "They cost too much," a fellah will tell you.

It is, in fact, these slender profits that enable them occasionally to buy a few clothes or tools, or even to save a little money to buy another water-buffalo or donkey to replace a beast that has died. What then remains from all their work? People will quote an old proverb: "The fellah is like a needle, which dresses other people but itself remains naked."

But once the peasants can succeed in organizing a sound co-operative, escaping from the money-lender's clutches, selling their corn or cotton crop at a proper price, obtaining good seed at the right time, and combining for the purpose of major irrigation, ploughing and harvesting work, they are freed from a host of daily cares.

The conclusions of the women trainees are the same as those of their colleagues who are concerned with farming or rural planning. "Import progress ready-made from outside? Useless, ridiculous. Even the finest examples of progress would leave the community indifferent—people would not even look at them. You might as well give a refrigerator to a fellah who has nothing to put in it and has never set eyes on an electric lamp. No; true progress takes place in the mind, it comes from within."

Unesco has recently published a booklet entitled "Sirs-el-Layyan" which describes the work of the fundamental education training centre for men and women teachers in the Arab states. This publication can be obtained from Unesco national distributors listed on page 66, price : $ 0.25 ; 1/6 ; 75 Fr francs.

A ghost village comes to life

FOR three hundred years the port of Brouage on the Atlantic coast had been one of France's greatest harbours—rich in peacetime, powerful in wartime, and known throughout the world. All that ended several centuries ago. Brouage became a ghost village—almost deserted, almost derelict.

Two years ago, however, sixty students from ten countries came to Brouage to try to restore it to life. The students all belonged to the international voluntary work camp movement. Brouage was their latest assignment in the "pick and shovel" international co-operation for which the movement is famous.

One of France's greatest scholars at the time of the Renaissance, Nicolas Alain, described the Brouage of his day in these terms. "Right in the centre of this plain," he wrote, "you see a great arm of the sea reaching into the land, forming a port which is famous throughout Europe." Alain pointed out that access to Brouage was as easy as it was safe. And he added: "Vessels come here from Germany, Flanders, England and other countries to load salt which is produced here in enormous quantities."

That was the Brouage that existed until about three centuries ago—a major Atlantic port and a famous city that occupied an important place in French history. It was, for instance, the birthplace of Samuel Champlain, the founder of Quebec in French Canada. Most important of all, Brouage played a key role in the struggle waged by Cardinal Richelieu during the Seventeenth Century Wars of Religion. To counterbalance a hostile La Rochelle to the north, Richelieu ringed Brouage with a mile of ramparts that stood thirty feet high, crowned by tall watch-towers. At one time four thousand men were garrisoned inside its walls, and ships-of-the-line rode at anchor in the harbour.

But then history turned against Brouage. Richelieu's enemies sank ships in the harbour mouth. Gradually the sand accumulated and the great natural inlet silted up. Ships found other ports. The people left and the houses fell to ruins. Inhabitants of surrounding villages used Brouage as rock quarry to build their homes. Moss and ivy overgrew what was left of the ramparts.

Today, the traveller will search in vain for this historic harbour. The sea has retreated long ago and Brouage has become an inland village. Where there once lived thousands of people, today only two hundred and fifty remain—mostly oyster fishermen and their families.

However, Brouage still has friends anxious to see it preserved as an historical site. One of them made its plight known to Concordia, a French organization set up to help direct international camp activities on French soil. Before long, Brouage was assigned to the international volunteers as a new project that needed their help—actually as one of the more than nine hundred projects taken on by the work camp movement in 1953 throughout the world.

In July 1953 tents went up outside Brouage —for the first time in three centuries. The tents housed a peaceful army of sixty students. Some came from France and nearby countries. Others came from as far away as India, Togoland, and Viet Nam. Together the students got down to work. They stormed the ancient ramparts with ladders and mountain-climbing gear and began to restore them. They attacked the encroaching sand dunes with shovels, and they hacked away at the unsightly underbrush. Once all this preliminary work had been completed, the French Historical Monuments Office was able to go ahead with the delicate job of restoring the watch-towers and the other ruins.

Brouage's inhabitants quickly adopted the campers. The fishermen took the foreign visitors out to the famed oyster beds and showed them how a French fishing village works and lives. For both campers and fishermen, the whole scheme was a great success—a fine experiment in international co-operation. And the officials of Concordia, the sponsoring organization, were so pleased that they organized a new work camp in 1954 to continue the job of restoring the almost-forgotten town—a task which will be carried forward again this year by a new group of students.

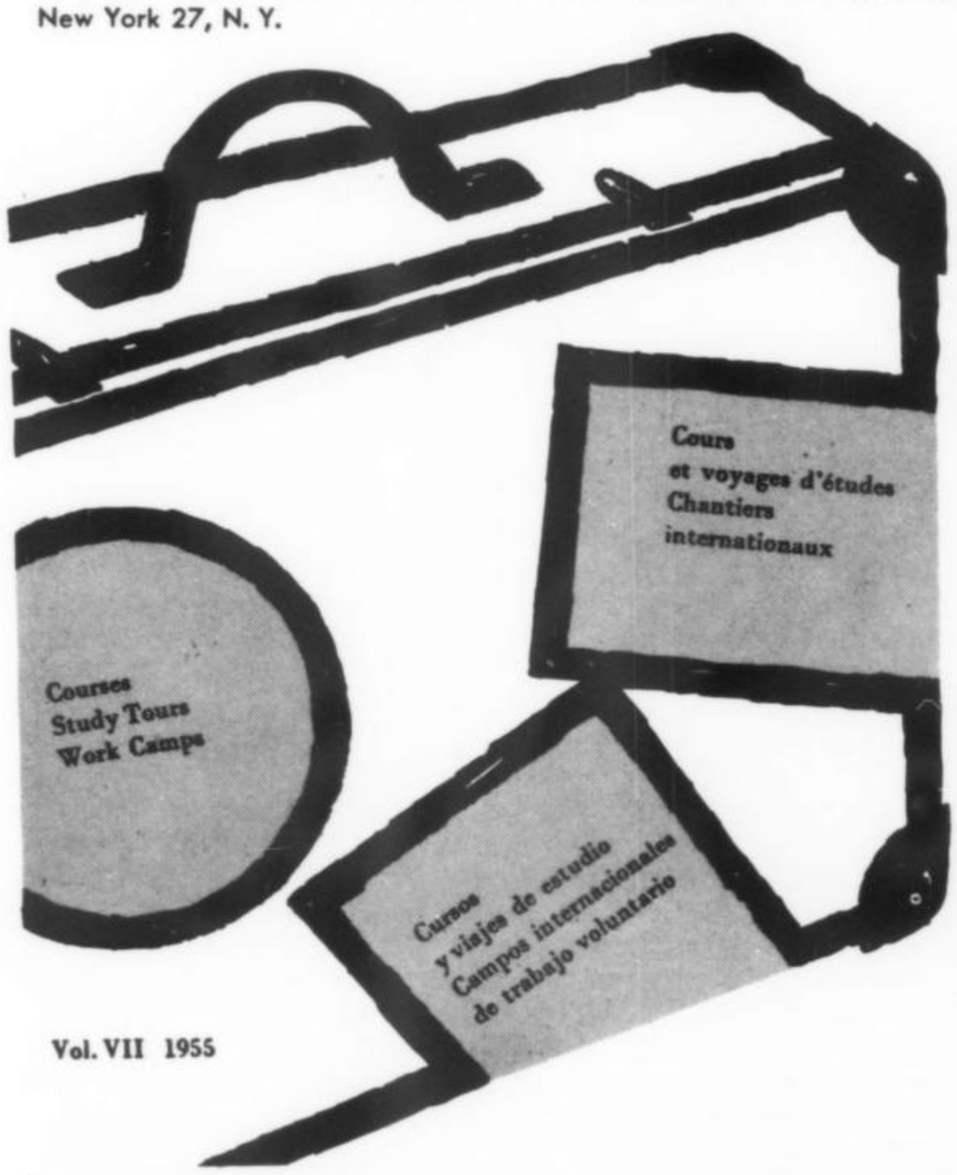
The work camp at Brouage is only one of hundreds of projects organized in all parts of the world by the international work camp movement. Recently, reports on such projects were made at the Eighth Conference of Organizers of International Voluntary Work Camps, sponsored by Unesco, and held at Marly-le-Roi, near Paris.

They showed that 69,283 young people took part in 1859 work camps organized during 1954. Almost half of them (31,780) worked in village development schemes in India: digging wells, building roads, improving sanitation and irrigation.

Seventy-seven camps were organized to assist in the construction of youth centres playgrounds or sports fields and 2,527 volunteers in 36 camps assisted in reconstruction work after the earthquakes in Greece and Algeria, the avalanches in Austria and the floods in India.

Going abroad?

Persons wishing to combine their summer vacations with an educational experience should read Unesco's latest edition of "Vacations Abroad." It gives details in English, French or Spanish of nearly 800 courses, study tours or work camps up to October 1955. Activities in 67 countries in Europe, Asia, Africa and America are listed. There is a section on special travel rates for students and young people going abroad for their vacations. Obtainable from Columbia University Press, 2960 Broadway, New York 27, N. Y.



Munich: international weather vane for children's books

by Brigitte Gnauck

For the past six years a unique project, the International Youth library, (Internationale Jugend-Bibliotek) in Munich, Germany, has been actively furthering international understanding among children and young people through their books. Founded as a model library for children and as an international centre for all persons interested in youth literature, it has now collected some 24,000 books from 39 countries. In January 1954 it was made an Associated Project of Unesco in recognition of the pioneering work it has done for international youth literature and education.

WHEN you walk through the ruins of Kaulbachstrasse, Munich, a stone's throw from the university, you will see, as everywhere in Germany's bombed cities, a sight most touching to those unaccustomed to ruins: A slender birch-tree or a sappy lilac bush perched high upon a crumbling wall or a heap of rubble. It seems a miracle that they should take root and a mystery how they are nourished. But there they are, and they thrive.

Nearly six years ago, when the International Youth Library was set up in a little villa in one of the backyards of this street, it was no less adventurous than those lonely trees or bushes. Of all countries, Germany seemed ,to be the most barren soil for such a project. But a journalist from London and a true friend of youth, Mrs. Jella Lepman, did not think so, and time justified her optimism.

"Children whose world has been destroyed, are just as hungry for food of the mind as for bread," she said in a speech at the International Congress on Books for Young People, held in Zurich two years ago.

The International Youth Library grew a little haphazardly at first, but for that very reason it had and has retained a charm so often absent from many state-run institutions for youth. The 200 to 300 children who walk in every afternoon seem to look on the library as their home. There are no entrance cards or fees. They move about freely among the shelves stocked with 24,000 children's books from 39 countries. Most of them are gifts from publishers all over the world, from America or Turkey, Indonesia, India or Denmark.

When Mrs. Lepman asked publishers to send her free copies of their new publications the response was generous though not all the material that came in was really valuable, and some was even worthless. Little by little, however, Mrs. Lepman's small staff—one administrator, four librarians and one assistant—have sorted the books, putting aside the inferior ones, and arranging the rest on shelves according to the countries they come from. Every year the best are displayed around Christmas time, in an exhibition which is visited by authors, publishers, parents, and people interested in juvenile literature from many places.

But the final judges are the youngsters themselves. Whenever they return a book, they are asked to put down their opinion about it. And then there are the "Book Reviewers' Groups" for youngsters between 9 and 17, who, under the guidance of a psychologist or a librarian, read books—frequently those by foreign authors—and discuss and review them. And they love it.

Mrs. Lepman's main object, of course, was to acquaint the children with literature from abroad. Did she attain her goal? It must be admitted that the language barrier still is a serious difficulty. The smaller children certainly take the attractive French, English, Italian or "still more foreign" (Chinese, Indonesian) picture books from their shelves and gaze at the illustrations. But they don't understand the text. One of the library's future tasks, with an enlarged staff, might be to make tests with at least some of these books by adding typed or mimeographed translations. Otherwise the diversity of languages remains forbidding.

However, there is a great variety of translated books. (Up to 25% of Germany's yearly juvenile book production are translations). How do the youngsters react to them?

(Cont'd on page 14)

Dr. Brigitte GNAUCK. journalist and author, is a member of the Secretariat of the German National Commission for Unesco in Cologne.

' The fish I had for lunch '

Children have thrown themselves heart and soul into varied activities that flourish in the friendly atmosphere of the Munich Youth Library. Domain of the painters is an attic-studio, but in fine weather easels are moved into the garden. Exhibitions of these children's work have gone round the world and some of their self-portraits were included in Unesco's publication, "Art and Education". One of these (below) illustrates why a child's concrete and imaginative mode of thought is rarely accessible to adult understanding. When a teacher asked the six-year old author of this painting if she was supposed to be carrying a basket, she replied: "Of course not, that's the fish I had for lunch." (Photos copyright Hans Schürer and Ikki Lüdeke, Munich. Drawing taken from "Art and Education")

Munich Weather vane

(Continued)

It is quite apparent that, as a whole, German youth is more serious-minded than non-German children who visit the library. "Truthful" is the highest attribute German children can give to a book. This applies not only to the older ones, but even the 8 to 9-year-olds. In the written reviews "too sentimental" is a much repeated comment, or "... a valuable book, because of its high moral interest".

For instance, the majority deem "Alice in Wonderland" or P.L. Travers' "Mary Poppins", the flying nursemaid who drops from the sky, "too confusing and fantastic". Adventure books are in high demand, if they describe something "one might do oneself". For the same reason most "Utopian" ones are condemned with a smile as: "Too improbable".

Of the foreign authors clear favourites—besides the old classics like Swift or Defoe—are: Hemingway ("The Old Man and the Sea"), Kipling, Pearl Buck, Lawson, Thurber, C.S. Forester, Catherine Pinkerton, St. Exupéry, Guareschi, Heyerdahl, Selma Lagerlöf, Hamsun, Monroe Leaf ("Ferdinand, the Bull") and, naturally, Felix Salten ("Bambi").

Findings of this sort are being collected and tabulated more and more and put at the disposal of interested writers, illustrators, publishers. Mrs. Lepman's institute tries to become a sort of clearing house for youth literature by collecting information from all over the world. She began by sending out questionnaires on youth book production, children's libraries etc., to 24 countries, 21 of which have replied so far. And she hopes to extend this inquiry to all member states of Unesco.

Due to her stimulation, an International Board on Books for Young People was founded, uniting for the first time, publishers, librarians, writers and educators. It held its first international meeting last year in Zurich.

Unaware of this growing clearing house and research work, for which they are the happy "guinea pigs", the children enthusiastically embark upon the many more delightful activities that have sprung up like wild saplings in the friendly atmosphere of the house.

The attic is the domain of Mr. Steidle, a gifted young painter and art educator, and his youthful artists. Exhibitions of their work have gone around the world, and some of their self-portraits were included in Unesco's publication, "Art and Education"

There are the language classes—English and French, so far—taught from picture books; there are lectures by authors of youth books, who often have a hard time coping with the merciless criticism of their young audience.

And once a month the easels are moved out of the attic and the "United Nations" moves in. Sixty-eight children, aged from 12 to 17, find it fun to sacrifice their free Saturday afternoons to listen to 10-minute speeches, in which the youthful delegates give what an adult would often think a highly technical description of "their" country. The favourite countries, mostly far-off ones, are represented by two or three delegates.

The youngsters take their assembly very seriously and ask questions that might well embarrass a teacher. Yet most delegates can provide the answers, as they are excellently informed. Before they make their speech, they ransack library shelves for material. And without being aware of it, they become acquainted with many countries they never thought of before and, at the same time, with the forms of international parliamentary life. Adults, by the way, are not admitted to the sessions. "We want to keep this strictly a youth affair," says Dieter Dederichs, the president, aged 16.

The whole library is strictly a youth affair. Its refreshing, youthful atmosphere in itself is international. For, as Mrs. Lepman says, "The child still possesses the whole globe. Only the grown-ups are fenced in, or think they are."

Junior U.N.

Once a month under their 16-years-old chairman, some seventy young people meet together for a "Junior U.N. Assembly" (above) at which delegates give well documented reports on countries they have chosen to represent. No less serious—despite the smiles—is the work of the book reviewing group (left). Discussions between the young critics are sometimes broadcast by Munich Radio. Final judges of the books are, after all, the children (below) who throng the library. (Photos copyright Hans Schürer and Inge Lœffler)

How code-breaking techniques unravelled a lost Greek tongue

THE CASE OF THE FOUR-HANDLED JARS

by

Darsie Gillie

A recent discovery has made Greek the only rival to Chinese as the language with the longest written record. Both languages can now be traced back from their present modern spoken forms, through successive changes, to somewhere around 1400 B.C., that is to say for three thousand three hundred and fifty years.

The history of writing goes back for another fifteen hundred years in Egypt and Mesopotamia, and probably in India. But these earlier languages have all long ago died out. No one today speaks a language derived from Egyptian. There are very ancient Sumerian or Babylonian or ancient compositions in Sanskrit, but these were preserved for many centuries not by writing but by a very accurate system of memorising. At all events, Sanskrit became a purely literary language more than two thousand years ago.

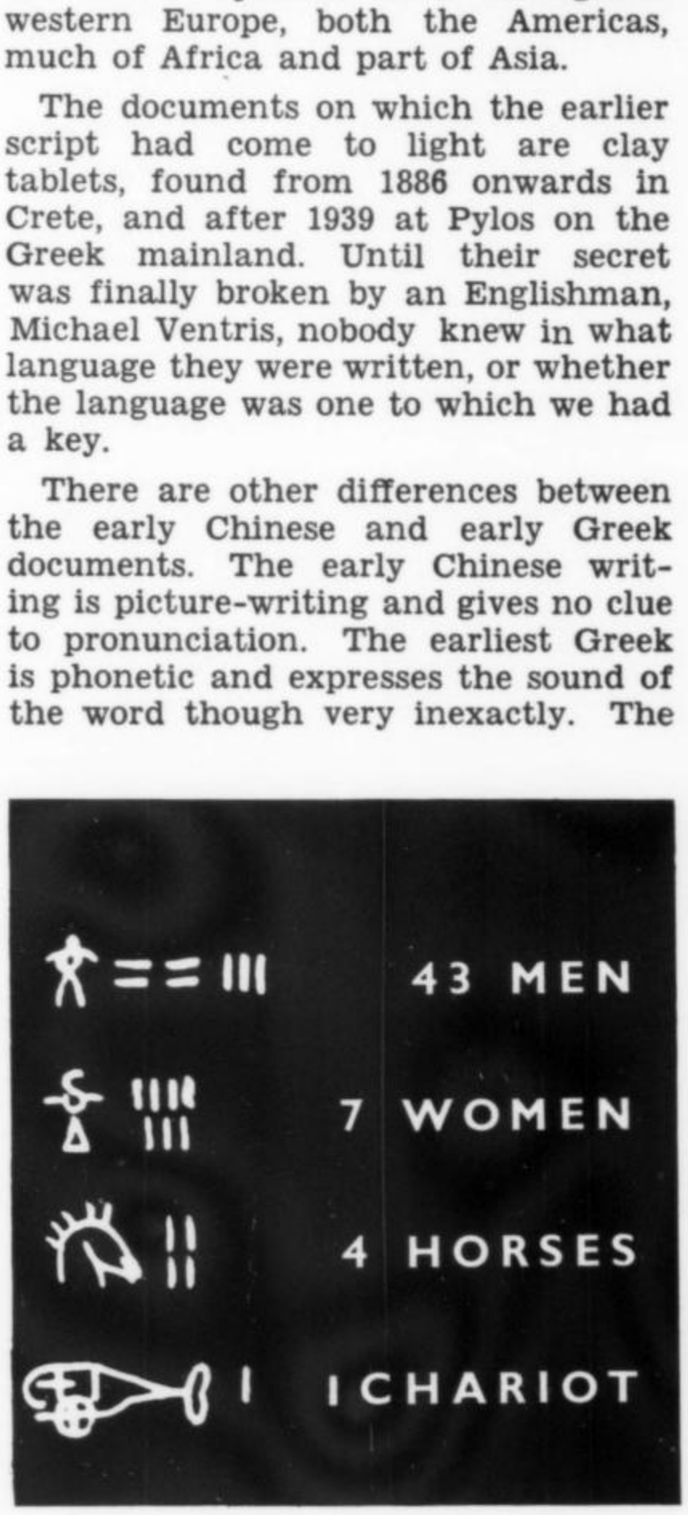
There are big differences between the oldest Chinese and the oldest Greek documents. Chinese writing, like Chinese speech, has had one continuous history. The modern characters are derived from the earliest, even though there has been so much change that only a few scholars can read the latter. The earliest Greek documents on the other hand are in a script that has nothing to do with the alphabet that the Greeks adapted from the Phœnicians about 750 B.C. and continue to use to this day. This "less ancient" Greek alphabet was the parent of the Cyrillic alphabet, used in some modern Slav languages, and of the Latin alphabet used throughout western Europe, both the Americas, much of Africa and part of Asia.

The documents on which the earlier script had come to light are clay tablets, found from 1886 onwards in Crete, and after 1939 at Pylos on the Greek mainland. Until their secret was finally broken by an Englishman, Michael Ventris, nobody knew in what language they were written, or whether the language was one to which we had a key.

There are other differences between the early Chinese and early Greek documents. The early Chinese writing is picture-writing and gives no clue to pronunciation. The earliest Greek is phonetic and expresses the sound of the word though very inexactly. The earliest Chinese documents are questions inscribed on bone, so that the gods may give an answer by cracking the bone in one way or another when it is placed in the fire. The earliest Greek documents seem to be household accounts—though the household is generally a palace—and the resources drawn on are those of a small kingdom.

When we hear of an ancient system of writing being deciphered, most of us think of the Rosetta stone with its texts in Greek that was known and in Egyptian that was not yet known. But that is not the only way a script can be deciphered. Just as any military cipher can be broken in time, provided the language is known, so any ancient writing can with patience be made to yield its secret provided the language is closely enough related to another known language. If the language is unknown, then there is no hope unless a document comes to light which gives the text in both the unknown and a known language as did the Rosetta stone.

The excavations of Sir Arthur Evans at Knossos in Crete toward the end of the last century revealed a palace several times rebuilt and on the last occasion destroyed about 1400 B. C. In the ruins were found tablets in three scripts—a hieroglyphic or picture writing, a more sophisticated writing called Minoan Linear A and, in much greater quantities and connected with the last palace, a third system called Minoan Linear B. This was derived from the second, as the second was from the first. It was long supposed that all



(Cont'd)

THE CASE OF THE FOUR-HANDLED JARS

★ Royal kitchen records from Minoan Palace 1400 B.C.

Until three years ago oldest surviving record of Greek language and earliest readable European writing was inscription on a Dipylon vase from Athens (750 B.C.). Older inscriptions found were undecipherable until British expert Michael Ventris, using wartime de-coding techniques, broke secret of Minoan script. Tablet (right) unearthed in 1952 proved his deciphering correct. It contains list of handled jars in royal kitchens dating back to 1400 B.C. Second and third lines show vases with two, three, four or no handles. Decipherment would have been practically impossible without small vertical stroke separating each word. (Photo C.W. Blegen, drawn inscriptions Ventris; from "Archaeology")

t-ri-po-de, Ai-ge-us K-re-si-jos we-chei :
"Two tripods; Aigeus the Cretan (?) brings them: 2 TRIPODS."

QE-TO (??) :
"Wine-jars (?): 3 JARS." (Or quel-thos "tribute" ?)

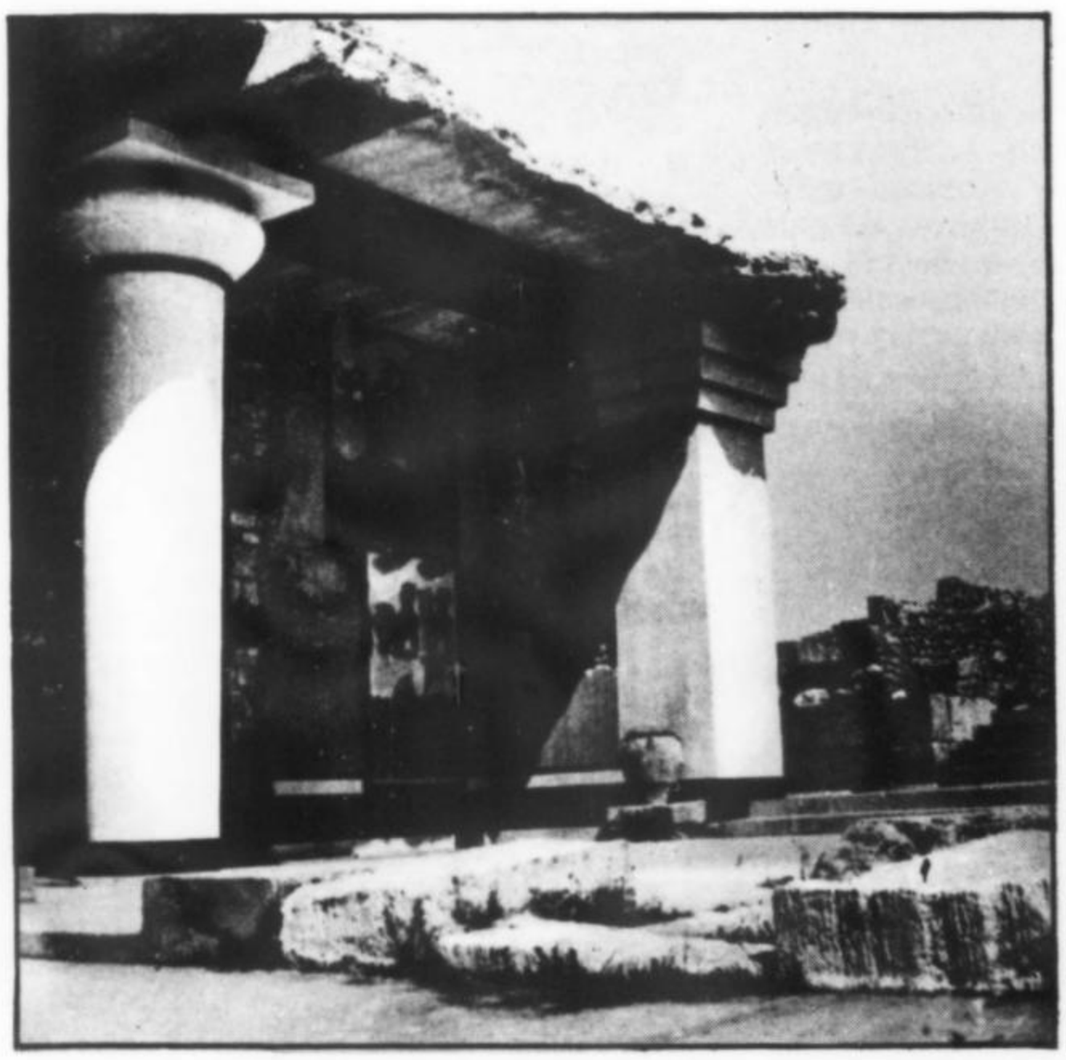
di-pa-he me-zo-he t-ri-o-we-he :
"Two larger cups with 3 handles: 2 CUPS."

three systems of writing represented the language of the people who created the so-called Minoan civilization of Crete; that the palace had been destroyed by the early Greeks from the mainland who called themselves Achaeans.

It is certain that the Achaeans first learned from and then conquered the Minoans, but it now appears that they did it rather earlier than was first supposed. Already before the Minoan Linear B script was deciphered some archaeologists had pointed out resemblances between the art in the last palace of Knossos and the palaces of the Achaeans on the mainland. Then came the discovery of Professor Blegen at Pylos in South Greece in 1939 of 600 "Minoan" tablets in an undoubtedly Achaean palace. Perhaps the Linear B tablets were in some early form of Greek and might be read!

The tablets of Knossos had been carefully scanned for years by scholars with little result. It was apparent that most of them were lists. Numerals could be distinguished. They seemed to be rather hurriedly written—like the day-to-day accounts of an office. There were about 80 different symbols, apart from little picture signs which seemed to indicate the kind of objects in a list—jars, men, chariots.

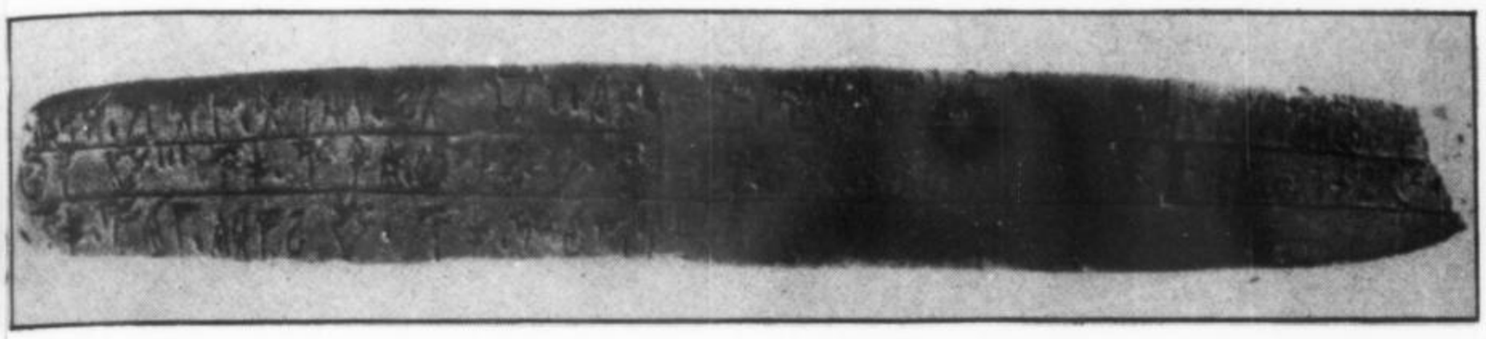
Eighty signs were too many for an alphabet, that is a system of writing in which each sound has a sign of its own, but too few for one of the early complicated systems in which many whole words have a picture sign to themselves. It must therefore be a syllabary, that is a system of writing in which each sign represents a syllable. But with only 80 signs, it must have been devised for a language in which most syllables consisted of one consonant and one vowel, rather like Japanese, in which there are rarely two



PALACE OF KING MINOS AT KNOSSOS IN NORTHERN CRETE, A VAST BUILDING KNOWN AS "THE LABYRINTH" AND FABLED LAIR OF THE MINOTAUR, THE MONSTER OF

t-ri-pos, he-mei po-dei O-WO-WE (= ou holwei?) :
"One tripod; it is not sound (?) as regards one foot: 1 TRIPOD."

t-ri-pos, K-re-si-jos we-chei; a-pu-ke-ka-u-me- (nos) sk-le-a (...) :
"One tripod; the Cretan (?) brings it; charred around the legs... (1 TRIPOD)."



di-pas me-zo-he que-t-ro-wes : (for Mezon !) :
"One larger cup with 4 handles: 1 CUP."

di-pas me-w-jon que-t-ro-wes :
" One smaller cup with 3 handles: 1 CUP."

di-pas me-w-jon t-ri-jo-wes :
"One smaller cup with 3 handles: 1 CUP."

di-pas me-w-jon a-no-wes :
"One smaller cup with no handle: 1 CUP."

consonants together. This did not seem very like Greek, but an American scholar, the late Alice Kober, showed that there were changes in the terminations of words, as in Greek and other Indo-European languages, which might well correspond to masculine and feminine and to case-endings.

Finally, when all the tablets found at Knossos and Pylos had at last been published so that scholars could work on them, Mr. Ventris applied the principles used to break ciphers during the war and offered a hypothetical list of values for the signs. Making allowances for the fact that the Greek of these new texts was from five to seven hundred years older than any that had hitherto been read, the proposed solution did seem to work. Might this be chance ? Then in 1952 a tablet was discovered at Pylos, which contained a list of jars in the royal store rooms. There were little pictures of jars without handles, with two handles, with three and with four. The words beside them read, as deciphered by Mr. Ventris, "with no ears", "with two ears", "with three ears" and "with four ears". There could be no more doubt—the right solution had been found.

Greek had changed a great deal between the time of the tablets of Knossos (C. 1400 B.C.) and of Pylos (1200 B.C.) and even the time of Homer (perhaps 750 B.C.), although the exacting rhythm in which the poems attributed to him are composed had preserved many old words. Secondly the Minoan B. script must originally have been devised for quite a different language. It does not distinguish between P and B, K and G, R and L. It cannot express exactly any syllable which ends with a consonant. Thus the words "pater" meaning "father" and "pantes" meaning "all" are written by the same two signs indicating "pa-te". You have to know the subject matter to avoid errors. That is why the little picture signs had to be used.

Strangely enough, all that has survived are bills, invoices, lists of persons owing money or services, lists of cattle and the like. The tablets were probably of unbaked clay only kept until final entries could be made on more expensive material, vellum or papyrus. The palaces where they were kept were destroyed by fire. The "permanent" records perished in the same flames which baked and so made permanent the rough notes of the bailiffs, tax collectors and merchants.

Have we lost in those flames the works of earlier Homers ? That does not seem probable. So ill-fitting a script would be a very awkward instrument for writing down a poem or even a prose-history. It was apparently used chiefly by tax collectors and accountants. When the Dorian Greeks who had hitherto lived too far north to feel the influence of Cretan civilization swept south and destroyed the kingdoms of the Achaeans, the Minoan Linear B script seems to have disappeared along with the Achaean tax gatherers.

The records that have come down to us are very limited in scope, but they will provide a great deal of information about the Greeks, whose warrior kings besieged Troy. They show that the names of Homer's heroes were common in the days of which he sang. They show that the gods of classical Greece were already worshipped in the second millennium B.C. They give a voice to centuries of which we had found the handiwork, but of which no words remained to us.

Further, the deciphering of Minoan B, may yet lead to an understanding of the much rarer tablets in Minoan A ; also to those in a kindred script of about the same date now coming to light in Cyprus. These still undeciphered Cypriot tablets do not look like lists, but appear to contain texts of some length. One is perhaps a letter. But in what language ? That is another mystery—and another story.

GREEK MYTHOLOGY SLAIN BY THESEUS. (Photos Viollet)

Darsie GILLIE, Paris correspondent of the "Manchester Guardian", has been a foreign correspondent in Warsaw, Berlin and Paris since 1926. He has specialized in reporting on archaeology and in general on man's early history.

WATER: LIFE SAVER AND DEADLY POISON

Man can live without clothes, without shelter and for some time without food. Without water, he soon perishes.

The earliest settlements grew up around rivers, springs, wells and other primitive sources of water. Later, great civilizations and cultures were nurtured in the valleys of famous rivers—the Nile, the Euphrates, the Indus and the Ganges.

And as they grew always more and more water was needed. In fact, it has been said that throughout history, "after the passion of love, water rights have caused more trouble than anything else to the human species."

As time went on, the search for water for survival was gradually paralleled by an equally persistent quest for "pure" water. For thousands of years people increasingly demanded a more satisfactory sort of water for drinking and other purposes.

"It is good to keep water in copper vessels, to expose it to sunlight, and filter through charcoal" is a dictum not out of an engineer's report in modern times. It goes back about 2,000 years and was found in a collection of medical lore written in Sanscrit.

Another Sanscrit source of the same period gives more comprehensive and remarkably modern water purification suggestions: "Impure water should be purified by being boiled over a fire, or being heated in the sun, or by dipping a heated iron into it, or by filtration through sand and coarse gravel and then allowed to cool."

Unfortunately sensible advice like this has often been ignored in the past. As great civilizations flourished their growing populations very often themselves poisoned the waters on which their lives depended. Even a century ago cholera, typhoid, the dysenteries and other diseases caused by polluted water still ravaged the peoples of all the continents.

Since then, spectacular results have been achieved in protecting people against the menace of the many water-borne diseases. But no country in the world can afford to relax its vigilance concerning water sources and supplies. Serious and widespread cholera and typhoid epidemics were still occurring in Europe and America at the end of the nineteenth century. As late as 1937, a momentary breakdown in the water-purification system of Croydon, near London, let loose a terrible epidemic of typhoid fever. In Marseilles in 1943 there were 639 cases of typhoid with 127 deaths.

In the immediate post-war years 250,000 cases of typhoid with 25,000 deaths were occurring annually in Europe. In Mexico it was estimated that in 1948, 22 per cent of all deaths were caused by water-borne diseases. Experts believe that in many Asian countries the sickness rate could be halved by protecting water supplies and providing proper facilities for the disposal of wastes.

So long as sanitation remains at a primitive level and water supplies continue to be dangerously polluted, there is little hope of reducing the heavy loss of life that is brought about by water-borne disease. Moreover, the continuing drain on the finances of the underdeveloped countries resulting from the consumption of disease-ridden water constitutes a major obstacle in the path of their progress towards economic and social betterment. The provision of supplies of pure water adequate for their needs is a basic requirement of all countries and one that demands the highest priority in planning for the future welfare of their peoples.

A vast problem such as this calls for world action and a wider understanding of the basic relationship between water resources, health and civilization. This was why the World Health Organization chose "Clean Water Means Better Health" as the theme for this year's World Health Day on April 7. As such it served to emphasize WHO's concern for wider sanitation programmes and underlined a problem facing authorities in countries at all stages of health development.

But there are some people who view the prospect of millions more people enjoying better health with some misgiving. Lower death rates, they point out, mean more and more mouths to feed in a world which already seems unable to adequately feed its present population. In the following article, Jean Manevy, of the World Health Organization, outlines the basic facts of this problem of food, people and health, and suggests how it may be solved in the future.

IS GOOD
A WORLD

PLANNING FOR HEALTH in any community afflicted by water-borne diseases involves detective work to discover the incidence of sickness and the existence of human carriers of diseases such as typhoid. Here, by the light of an oil lamp, an Egyptian medical officer collects

OD HEALTH RLD THREAT?

data on enteric diseases in the village of Mit Hafa. He has come at night so as to question the men who work in the fields during the day. Bacteria and parasite studies were made on every third person among 1,783 villagers. Results were used in planning a new health campaign.

by

Jean V. Manevy

WHERE do we go from here? In practically every country throughout the world life expectancy is rising and the death rate is dropping. The pessimists, though, are wringing their hands in anguish over this and are forecasting the blackest future for humanity.

"All this is very fine," they say, "but what are we going to do with all these extra people? With all this better health there will be fewer epidemics and people will live longer. How is our planet going to support them when there are millions now who haven't got enough to eat?"

Some pessimists have even gone so far as to label DDT the "demographic curse" because it saves lives by destroying malaria-carrying mosquitos.

The cry of danger has been heard many times before. Even before the industrial revolution swept across Europe, economists saw that an improvement in world health would bring about a sharp increase in population and the pessimists predicted that the world would soon starve to death.

On the other hand it is just as easy to be over-optimistic and look at the problem through rose-coloured glasses. What are the facts? And is man capable of really meeting one of the greatest challenges he has ever faced?

Two hundred years ago, in 1750, the world's population stood at 700 million. By 1850 it had gone up to 1,000 million, and by 1950 reached the figure of 2,500 million people. Thus, in the last century our planet's population has doubled. Present calculations show that the world's population is increasing at the phenomenal rate of 85,000 to 100,000 persons per day .

By 1980, if the present rate continues, there will be an additional 1,000,000,000 people in the world making a total of 3,500,000,000. This means another increase of 51 per cent. Continent-wise the increase would look something like this: Africa, 45 per cent; the Americas, 61 per cent (32 per cent in North America and 96 per cent in certain tropical regions of South America); Asia, 52 per cent; Europe 31 per cent; Oceania, 30 per cent.

(Cont'd on next page)

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Pessimists and Optimists in Hot Debate

What do all these figures show? That our population is growing fastest in two-thirds of the world which is also the poorest and the least developed economically.

In the more highly developed countries the rate of increase is much lower. At the beginning of the present century these countries saw the start of a concerted programme for improving health conditions.

Hygienic measures, the reduction of working hours, slum clearance and the building of better houses, the spread of education—all helped, first to reduce the general death rate and then to win impressive victories over the death rate for infants and young children.

The average expectancy of life was 22 years among the Egyptians in the first century before the Christian era. In 17th century Europe it was from 30 to 40 years. The great medical discoveries of recent times have further contributed to reducing the death rate and extending the life span. It is now as much as 77 years among white women in North America.

In the most under-developed countries, however, precarious living conditions, lack of proper food, low wages and illiteracy are linked with a high death rate (one in two among young children), the prevalence of deadly epidemics, and also with a high birth rate.

Nevertheless, there has been progress—though small—during recent decades. Industrialization is under way, vast campaigns have been undertaken against tuberculosis and malaria, international action has been taken to check epidemics of plague, typhus and yellow fever, and new kinds of treatment have been more widely used. All this has saved a larger number of lives every year. A lower death rate and a longer life span combined with a high birth rate have caused the total population to increase at a faster pace than that of the production of consumer goods.

Optimists and pessimists are engaged in a hot debate about the "daily quantity of calories needed for the subsistence of the individual." Among optimists, estimates as to what the globe can maintain in the way of population range from 5,000 million to 16,000 million human beings. The pessimists, basing themselves on the one hand on the present Asian standards of consumption and on the other, on North American standards, reach the conclusion that the earth's maximum population should not exceed, in the first case, 2,800 million and, in the second case, only 900 million.

In addition, experts in population problems disagree as to what the future size of the world's population is likely to be. Some think it risky to presume that the earth will be submerged by its population at the beginning of the 21st century. They judge that the curve of the birth rate must surely follow the descending curve of the death rate, and that the increase of population will lessen. At the same time production, manned by young and healthy workers and freed from the costly waste of ill-health, will tend to increase.

Population specialists do agree, however, that there are three stages in population evolution.

First, there is the period of extremely high rates, both of births and of deaths. Populations tend to increase because of the high birth rate, but the increase is limited by the high death rate.

Then, there is the period during which both rates become subject to controls. First, the death rate tends to become lower in the direction of the ideal minimum which the present state of medical knowledge can hope to establish. But the birth rate remains high and is slow to follow the diminishing curve of death rate. The result is a spectacular rise in population.

Finally, there is the period during which both rates are maintained at a low level, with the result that the population remains stationary or tends slightly toward a decrease.

The countries which have reached these different stages have been classed as under-developed, semi-developed and developed. The fact is that the natural evolution of population corresponds with economic evolution: the effect of industrial development is to improve living conditions and to lengthen the average life span.

The estimated annual death rate in the whole world varies from 22 to 25 per 1,000 persons. In the most highly economically developed regions it falls as low as 6 per 1,000 while in the least developed regions it soars as high as 30 per 1,000. Death rates vary within countries according to social groups. They are highest among the poorest classes and lowest among the top income groups.

Between the years, 1000 and 1855, no fewer than 450 famines occurred in Western Europe alone, causing sharp increases in the death rate. Along with famines, great epidemics of plague, cholera, smallpox and typhus have until the recent past wiped out large numbers of persons. Plague alone claimed 10,000,000 victims during the Byzantine period and 25,000,000 (a quarter of Europe's population) in the 14th century. Smallpox and typhoid were responsible for from 10 to 20 per cent of all deaths in the 18th and 19th centuries (40 000 deaths in Prussia yearly at the start of the 19th century). Typhus, a dreaded result of wars and famines, was particularly deadly to children and adolescents.

Living conditions in the towns were often worse than in the country. In Stockholm, in the middle of the 18th century, the average length of life was 14 years for men and 18 for women, while in the whole of Sweden the averages at the same period were 33 and 36. In the United States in the 1850's, half of the five-year old children in the countryside could hope to live to 65, those in the small towns to the age of 56, and those in the large towns to the age of 41.

The struggle to bring down the death rate really began about 1850 when important social and economic changes were taking place. Between 1840 and 1940 the average length of life in Europe rose steadily from 39 years to 63 years for men, and from 42 to 66 for women. Since then the upward movement has continued.

This does not mean that the progress of science and medicine has succeeded in lengthening the span of human life. Taken as an individual, a man of the 20th century does not live any longer than one who, two centuries earlier, was lucky enough to escape illness until an advanced age. But, in the 20th century, an infinitely larger proportion of men and women reach old age. It is the reduction of the death rate among children, and especially among infants, that has had a decisive effect on the extension of the human life span.

Better knowledge of hygiene and increases in incomes have both affected the infant death rate. For example, in the United States during the 1920's the rate among the poorest classes was 170 per 1,000 births while among the richer classes it was only 50 per 1,000 births.

For a long time, while over-population was linked with bad housing conditions, the rate was higher in the towns than in the country. Nowadays, however, this situation has reversed. Wars, accompanied by serious food restrictions, quickly cause rises in the infant mortality rate. The example of Leningrad is especially dramatic : before the war, the rate varied between 140 and 150 per 1,000 births ; during the siege of 1942, it shot up to 748 per 1,000.

Recently the rate has decreased in a most spectacular manner in the highly developed countries. In some it has fallen to the record low figure of 20 per 1,000 births, whereas at the start of the 20th century more than 30 out of every 100 infants died in their first year. There is a startling similarity between the health situation today in the underdeveloped countries and those that prevailed 150 or 200 years ago in the countries now considered developed. Infant mortality still reaches 500 per 1,000 births. The average length of life is little longer than 30 years. Epidemics still sporadically take their terrible toll. Tropical countries have even more of their share of illnesses : sleeping sickness, yellow fever, yaws and many others. Experts agree, however, that the death rate caused by such illnesses can also be reduced by improved living conditions.

Important and successful steps have already been taken to force down the death rate in large areas of the world : great vaccination campaigns, a struggle against malaria on the international scale, quarantine measures to control epidemics, and the vigorous co-operative activities carried out by the governments of the countries concerned.

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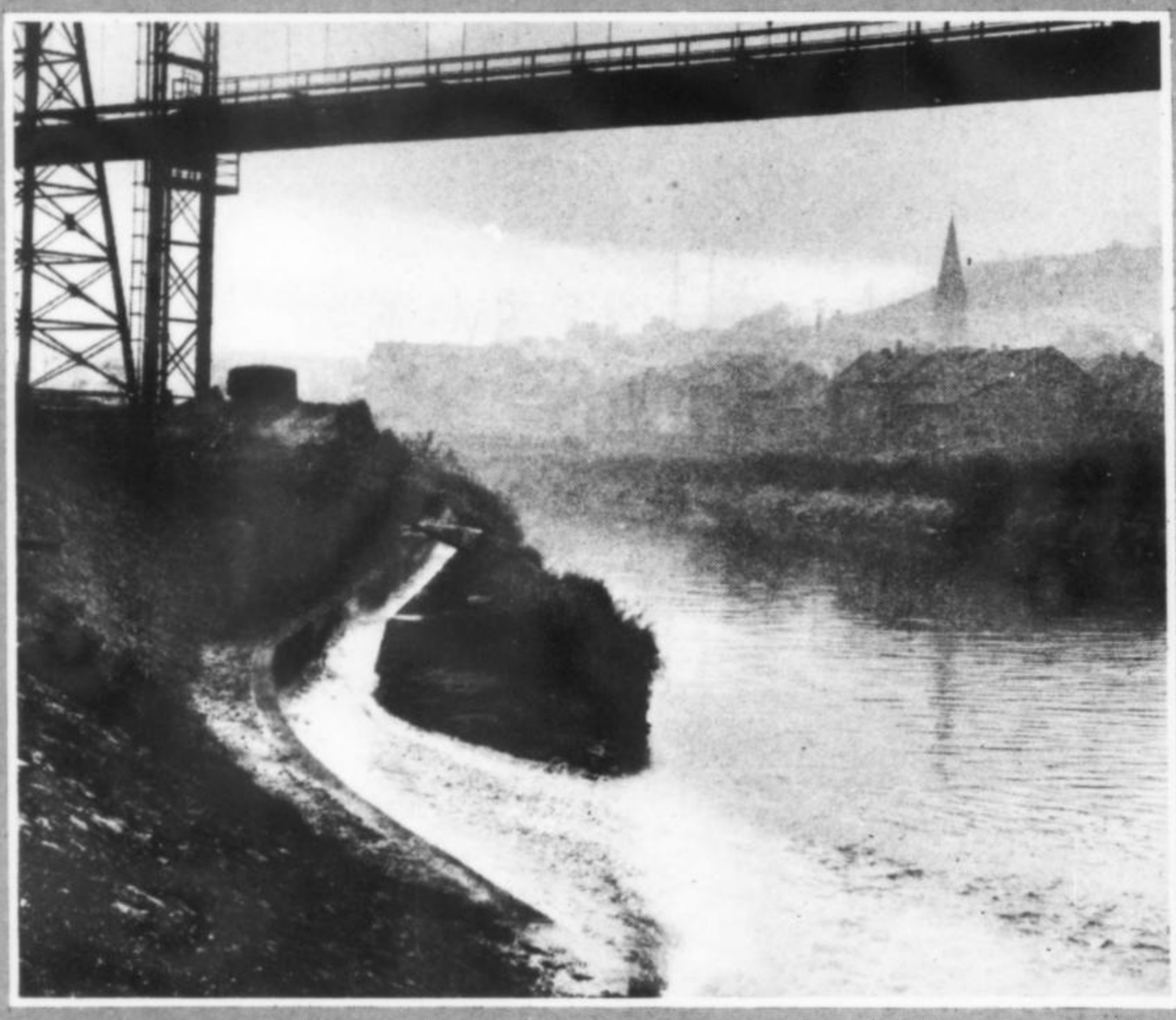
SHOWERTIME in the Korsager School, Copenhagen. This regular school bath is just one small detail of a well co-ordinated system of school health services which help to keep Danish children among the healthiest in the world. (WHO photo)

Good health

(Continued)

IN PERILOUS WATERS—The modernization of agriculture, the growth of industry and the rapid expansion of cities have all increased the threat of contamination to water supplies. (WHO photo, left). Rivers and canals in some countries are often the home of the snail that harbours the bilharzia parasite. Boys swimming in the irrigation canal (centre) run every chance of catching the intestinal and bladder disease caused by this parasite. Governments are attacking the problem on two fronts: through education in hygiene and by mass injections against bilharzia. (Unesco Photos taken in Egypt)



Nevertheless, the infant death rate in these countries is still from 40 to 50 per cent of the general mortality. Thus, a decisive factor in the campaign depends ultimately on substantial improvements in economic conditions.

The birth of a child is considered a happy event in every class of society in every country of the world. Within the family, it means that there will be someone to go on living in the home, that the soil will be tilled, that the care of parents in their old age will be assured.

To the nation, it means that the people have a future, that the homeland will be defended, and that the economy will have the manpower it needs to expand. Everywhere on earth, children and young people symbolize vigour and prosperity.

In the under-developed countries, the birth rate is infinitely higher than that in other countries, but so is the death rate. Though one out of every two children dies before his first birthday, this does not check the natural growth of the population. But when the total population of these countries rises through high birth and death rates, it does so wastefully because such a growth of population means a high proportion of dependent persons.

It has been calculated that each new child represents an economic deficit until he is 15 years old. From then on, the work done by the adolescent each year pays back the cost of his maintenance during a previous year. At 30 years, the "capital" invested in the child is paid back by the young man. **After 30,** the grown man represents economic credit —"active capital"—capable not only of taking care of himself, but also of a dependent person. But in the under-developed countries, infant mortality alone accounts for from 40 to 50 per cent of the total death rate, and the average expectancy of life scarcely exceeds 30 years.

The demographic situation in the largest part of the world today can be summed up as follows. The efforts of medical science have almost everywhere reduced the general death rate, but the infant death rate has not diminished in the same proportions. The lowered death rate and the maintenance of the birth rate at a high level has speeded up population growth, but the development of young, healthy, productive generations has not been accelerated. If the death rate can be lowered for all ages, there is a chance that the proportion of children surviving until the period of their productivity will increase. And this will also mean an increased return on the investment in their upbringing.

The situation can be compared to that of a young married couple with limited resources who, expecting a baby, get quintuplets. If the couple does not get outside help and if it has no chance of increasing its income, the result will be disastrous ; the children will starve. But, if by some miracle, the quintuplets can reach an age at which they can earn money, the family will be saved, and may even become prosperous.

Today overpopulation is no longer a problem for individual nations ; it is one of the most important international questions. That is why the United Nations recently convened a congress of leading population experts from all over the

world in Rome. They included specialists of the World Health Organization, whose activities have greatly contributed to reducing the death rate ; of the Food and Agricultural Organization, and Unesco.

Three major theses were presented at the World Population Congress.

First, that "in order to build a family in a rational manner" man should use various birth control methods.

Second that mechanical or chemical methods of birth control would be contrary to the laws of nature, but that man, as a superior being, should be able to master his instincts and to decide for himself the size of his family, adapting himself to the economic conditions which he faces.

Finally, there was the view that the growth of population is not a problem which can be solved by birth control, but by a better division of consumer goods and resources.

Nevertheless, the supporters of the three different viewpoints seemed to agree on one thing — that the generation which discovered the secrets of the atom should be able to find a constructive answer to the oft asked question : will the vast number of human beings who are being saved today by the progress of medical science be condemned to die of hunger tomorrow?

Every night, more than half the people on earth go to bed hungry. Some 1,400 million men and women in Asia have only enough food to keep them alive. The situation as nutrition experts see it is that each of these people has less than the 2,400 calories which are considered the daily minimum requirement to maintain life. Immense numbers of people in Africa, Latin America and Europe have only a trifle more than that minimum. The people of some countries of Europe, North America and Oceania have rations equal to — or more than — the 2,800 calories which the specialists consider every human being should have daily.

Growth of the population will make the situation even worse unless better means are found to increase the production of consumer goods and to improve their distribution. At a time when some regions are threatened by famine, other parts of the world face the problem of disposing of surplus stocks of cereals, and of reducing planted acreage.

The earth has far from reached its maximum capacity of production. Some people believe production can be increased from 40 to 50 per cent. Others are convinced that if all the farmers of the world adopted the best methods now known, food production could be doubled without adding to the present acreage.

In the United States, for example, the 1952-1953 crop was double the annual crops during the 1934-1938 period. The yield per acre increased by 70 per cent while the planted area increased by only 20 per cent. However, increases in the yield of land will not suffice to feed mankind if during coming years the birth rate continues to be high, if more lives are saved by science, and if the life span is lengthened even more.

At present the sea furnishes only about one percent of mankind's food, although it covers some three quarters of the surface of the

(Cont'd on page 24)

FRIEND AND FOE. Man has always settled near water, but fishermen such as these on the River Niger in the French Sudan live closest to it. It is their friend and their foe, it provides their livelihood and may also destroy them. Millions still fail to understand the link between polluted water and disease.

globe. Improvement in fishing methods could bring vast additional quantities of food out of the sea.

About one fifth of the earth's surface is unproductive because of its cold climate. But the earth's temperature is now tending to rise ; the ice is receding toward the poles. Every year new soil, varying from a few dozen yards to several miles, is being reclaimed for planting.

The arid zones can also be used if they can be supplied with water (by dams and irrigation canals) ; if the water can be kept from evaporating (by reservoirs or vegetation); if sub-surface water can be extracted and used ; if sea water can be de-salted (although such foods as cucumbers, carrots, corn, cabbage can be grown in soil irrigated by salt water). Some plants, such as the eucalyptus, grow perfectly in the desert and provide shade and fuel. The extension of desert areas can be checked by controlling the foraging of certain animals; goats, rabbits and various birds destroy the vegetation and permit the advance of the sands.

In the absence of electric and other power, the bringing of water into arid zones presents serious problems. Yet, studies are under way to solve them. for instance, by the use of solar and wind energy.

Considerable progress has been made to increase the yield of various crops. But new discoveries open far broader perspectives. For example, by adding a tiny dose of certain antibiotics to the food of cattle and fowl, their rate of growth is increased rapidly. Pigs fatten three times as quickly, hens lay a larger number of eggs. A pig raised with aureomycine reaches the weight of 43 kilos in a period of time during which it would normally reach only 30 kilos.

Hybridization or cross-breeding of plants also can increase the yield of acreage. In the United States, for example, new hybrids of corn have led to a 25 per cent increase in production, to an additional profit of $700,000,000, and to an annual increase of about 5,000 million pounds of meat, that is, about 40 pounds of meat more for each person.

In addition to increasing the area and the yield of planted ground, steps must be taken to protect the soil against the rains (which, every year, wash millions of tons of good earth toward the sea) ; against drought (which, in the absence of irrigation systems, can transform fertile earth into dust, as for example, the immense Tigris desert area which was once able to feed 30,000,000 human beings) ; against insects and parasites which every year destroy at least 10 per cent of the world's food crop (an amount which could nourish the whole population of Africa or North America).

Moreover, there are possibilities beyond those which have been stated briefly here by which man can feed everyone on earth : there are the new perspectives opened since the beginning of the atomic era.

The people of the world will have the chance for stupendous improvements in their food and way of life when atomic energy is fully used for peaceful, industrial purposes. The possibilities in this field seem limitless. Dr. Powell, of Bristol University, Nobel Prize winner, declared recently : "Used for production, the power of five hydrogen bombs could furnish a quantity of energy equal to that now produced by the work of all Britain's miners during one year."

SOURCE OF DANGER: For more than a hundred years people have taken water from this well in the French Sudan, and with every pail of water drawn the rope has cut more deeply into the beam. Thousands of open wells all over Africa contain unsafe water which undermines the health of the population. In many villages the water supply causes half the illness in the community. (WHO photo by Dr Holstein)

Water

WATER

everywhere

Did you Know that...?

UNIVERSALITY OF WATER. — Water covers about five-sevenths of the earth's surface to an average depth of three miles. The Polar regions of the globe are covered with great ice caps —water in solid form. The atmosphere contains enormous quantities of water vapour—often as much as 50,000 tons in the air over a square mile of the earth's surface at summer temperature. All our food contains water, from about 60 % in lean meat to as much as 95 % in watery fruits. About 70 % of the human body is water. Even the solid rocks of the earth's crust hold water in chemical combination with different mineral substances—so much of it, that most of the land areas of the earth would be submerged, if this water were suddenly returned to the ocean.

THE WISDOM OF THE ANCIENTS : The Palace of Minos, at Knossos, dating from about 2,000 B.C., possessed a system of drainage, Nineveh had its sewers more than 3,000 years ago and, about 588 B.C., the Cloaca Maxima of ancient Rome was built. Nevertheless, in the modern world in general, sanitation may be considered as having originated within the last two hundred years and as having been developed, uninfluenced by ancient knowledge, mostly during the last century.

IN FINLAND a great problem is connected with the wood-pulp industry. An average-sized Finnish pulp-mill discharges waste comparable with that of a city of one million population, demanding expensive treatment in order to prevent stream pollution.

IN DENMARK the National Public Health Service, in collaboration with the Danish dairy organizations, has undertaken an examination of water from 13,000 wells serving rural communities. Action has also been taken against the use of town sewage for watering farm-land, since domestic sewage has been found to contain eggs from the tapeworm.

SOME FACTS ABOUT WATER in the United States : More and more air conditioning, for instance, is a factor in our trend to comfortable living. But the air conditioning system of a large building may use 3,000,000 gallons of water a day—as much as a city of 25,000 people.

In industry today, water is the universal raw material. We use pure water in fabulous quantities :

24 gallons to produce a pound of paper; up to 10 gallons to produce a can of vegetables; 70 gallons to make a pound of woollen cloth; 10 gallons of water to produce every gallon of petrol; 65,000 gallons to produce a ton of highly-finished steel; 750 gallons of water to produce a ton of dry cement.

But even as the need for more water grows, the watersheds which nature fashioned to give us an ample supply are being despoiled. Cut-over, burned over land has been exposed to the gouge of the rain, letting it cut off topsoil and run uselessly away with a load of silt to clog dams and reservoirs.

Because of silt deposits, it is estimated one out of five of the nation's reservoirs will be useless in less than 50 years.

Water supply is a big industry in the United States of America. By weight of material handled, it is *seven times as big as all other industries put together.*

But vast though today's waterworks installations may be, they are not sufficient for the years ahead.

The US Public Health Service reports that almost 6,000 communities with no waterworks need and could support such facilities. To meet these needs, as well as to provide for the normal expansion of existing waterworks, will mean an estimated 3,000 new treatment plants, 9,000 wells and well-pumps, 8,000 storage tanks, and more than 45,000 miles of water-pipe.

IN FRANCE in 1950, two thirds of country-dwellers did not have piped water in their homes. Of 37,000 rural communes only 10,500 had a public service of potable water. Out of 38,000 French communes, scarcely 1,000 had any system of sewerage whatever, 300 had a reasonably good drainage system and only 80 possessed sewage treatment plants.

IN EUROPE only one in four homes have an indoor water supply and even in most advanced countries running water does not reach more than two thirds of houses in rural areas. In urban areas in most European countries indoor water supply is found in 56 to 96 houses out of every hundred.

LUCKY ICELAND. — Iceland has plenty of excellent drinking water (for its sparse population of one person to the square kilometre) from springs, rivers and brooks and it is so pure, clear and free from bacteria that no purification is needed.

More than half the population makes use of natural hot water, together with electricity from hydro-electric plants, for heating, lighting and cooking.

The many swimming pools and swimming halls use natural hot water almost entirely and it is quite free from bacteria. In most cases the quantity is so great that no recirculation is used and the hot water flows straight through.

IF pure drinking water can be provided to people and if human excreta can be disposed of without it contaminating the food and drink of man, a solution would be found for half the ill-health of people in the South-East Asia Region. The countries in this region comprise Afghanistan, Burma, Ceylon, India, Indonesia, Nepal and Thailand. Total population: nearly 500 million.

BURIED TREASURE. — "In the area north of Enugu all the way to Nsukka, water is available from a single stream during the dry season which lasts for about six months. People live up to about 30 miles from this stream and most of the population of about 200,000 store water in the wet season for use during the dry months. Pots of three to four gallons capacity are used for storage and the more well-to-do possess up to 300 such pots sunk in the earth to keep the water cool. In a survey about a million and a half of these pots were counted." (From a report by a WHO Public-Health Engineer on rural conditions in Africa south of the Sahara.)

KEEPING salt out of the water is one of the big problems in the Netherlands, much of which lies below sea level. The fact that the Rhine contains salt before it even enters the country is causing some anxiety. In 50 years' time, salt content of the great river has doubled, and apparently continues to rise steadily.

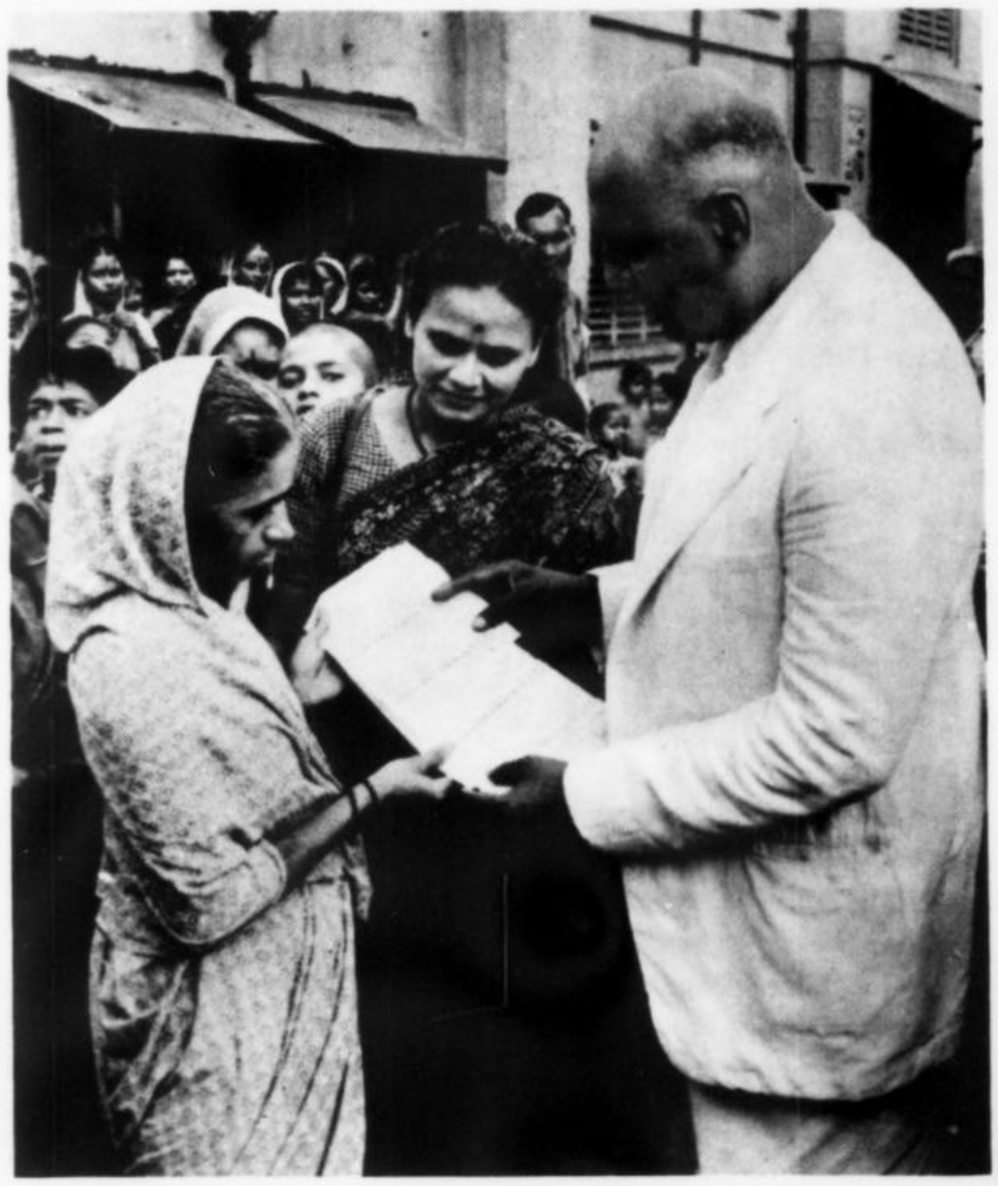
HEAVY INDUSTRIALIZATION, very high density of population, a small coastline and the absence of great rivers make for a serious pollution problem in Belgium. Some rivers, for example the Scheldt, are polluted before they even enter the country. Other rivers, the Lys, the Sambre, the Meuse, are polluted for long stretches. Sewage pollution of the coast, which in the holiday season is packed with people, is also an urgent problem. Research, the building of sewage treatment plants and the enforcement of laws against pollution are being energetically pursued by the authorities.

IN DENMARK public opinion is strong in condemning river pollution. This is partly due to the popularity of angling. Increasing interest is being taken in this sport and the angling clubs are very active in drawing attention to cases of pollution and agitating for its removal.

IN SWEDEN, there is a strong public opinion that something must be done about the pollution of rivers. This is partly because of the recent salmonella epidemic, on account of which numerous bathing places were closed. Though in Sweden, as elsewhere, it seems easier to prevent new pollution than to deal with that which has been long established, pollution of rivers has been increasing. Of recent years there has been progressive urbanization of the country and sewage treatment has not kept pace with this development. Improvement, however, may be expected.

BETTER LIVING THREATENS WATER. — The higher the standard of living, the greater the danger of pollution. Improved hygiene means the rapid removal of dirt and waste, which leads to pollution. Greater material wealth must mean an increase in manufacture, which leads to pollution. Less drudgery means a greater use of machines, which particularly through the processing of food leads to pollution. The more we have advanced, the more waste we have produced, and to expect our lakes and rivers to cope with the mess as they were often able to do in the past, is today asking too much.

Stamp of friendship



Unesco is one of the few Specialized Agencies of the UN through which individuals and organizations may be related in a tangible way to the work being carried on in non-political spheres of activity to strengthen the stability and peace of the world. Through Unesco Gift Coupons individuals and groups in 18 countries have sent aid to over 150 projects in 45 countries. In 1954, more than $200,000 was contributed to assist schools, libraries, laboratories and fundamental education centres in the less developed parts of the world. Above, American schoolgirls buy Gift Stamps and Coupons for new-found friends in India (right). Coupons have been used in Bombay centres to purchase vocational training equipment, educational films and projectors and kerosene lamps to light up night classes. (Unesco photos)

International Understanding Means Individual Understanding

by Shevawn Lynam

VOLUNTARY assistance to fellowmen is promoted by UNESCO as a means of bringing the peoples of the world together. The idea that if people only knew one another better they would understand one another better was in its heydey between the two world wars.

Never did more hitch-hikers with knapsacks and pocket dictionaries swarm across their neighbours' frontiers. Never did more artisans and factory workers, students and women's clubs set forth in stuffy chars-à-bancs to discover, through organized tours, how others live. For the first time, men could turn a little knob and listen to what people in far off lands were saying, or they could watch them at the local cinema living out their quaint lives in unfamiliar ways. People at opposite ends of the earth came face to face with one another as never before — and ultimately they fought one another as never in history.

The magnitude of the catastrophe in which all these attempts at understanding culminated might have driven men back to their primitive parochialism. Yet, before the last shot had been fired a vast new world organization was in the making. The composition of the governments and political parties had changed considerably since before World War Two, but the idea of cooperation for peace was sufficiently robust to withstand a materially devastating war and political change. The establishment of the United Nations was concrete proof that international understanding was not the vague dream of visionaries but a conception that had gained popular support. Some credit is due to the League of Nations which despite its political failure had given people the habit of thinking in international terms. In actual fact only a relatively small portion of time was devoted by the League of Nations to the political problems for which it failed to produce a solution. For every person involved in political deliberations there were dozens of anonymous and dedicated beings patiently engaged, year in, year out, in the unostentatious tasks of regulating the world's health problems, controlling the opium traffic, establishing methods of international cooperation in financial matters, communications and transport, or organizing world labour or intellectual cooperation.

BLIND CHILD at Mount Lavinia School, Ceylon, learns to read relief map. Materials were supplied to school through Unesco Gift Coupon donors in the United States, United Kingdom and France.

All these activities were dominated by the belief that genuine understanding can only be reached through free enquiry and unprejudiced analysis and that the resulting cooperation must not stop short at an exchange of benefits between equal partners; it must also involve the distribution of those benefits to all mankind.

In the many fields in which the United Nations carries on activities similar to those of the League of Nations, a fresh element must be taken into account—the human beings who, through the solemn declaration on Human Rights, claim their share in the benefits of civilization.

Half of the world is still illiterate. Little by little, UNESCO is breaking down this first barrier to international understanding and progress. It is enabling scientists, techniciens, librarians, teachers to come together for exchanges of information and joint research or study. It is enabling specialists in a wide variety of subjects to travel abroad and, thus, add to their knowledge and understanding. It facilitates the circulation of books and periodicals hampered by currency regulations and gives technical advice on the use of radio or television. Acting as a great centre for educational, scientific and cultural activities, it daily brings thousands of people into contact with their fellow-beings in other lands.

Yet, there are still today millions who are deprived of a right, second

Hands across frontiers

English school children in the Isle of Wight sent paint-boxes to these little Cingalese pupils who are painting picture-letters of thanks to their new friends across the seas.

The "Countrywomen of the World" is an international organization of rural women. They recently adopted a Unesco Gift Coupon project and are now raising $35,000 to make possible a training programme for the countrywomen of Ceylon, improvement of family and village conditions, and greater possibilities of education for women. Here Cingalese women draw water from newly built well now replacing foul water-hole. Contributions from women's institutions in Canada, Denmark, Holland, U.K. and U.S.A. are making such improvements possible. (Unesco photos.)

The ladies are responsible

only to freedom—their right to learn. Sometimes there are no schools, sometimes there are no teachers—but everywhere, all over the world, there are thousands of willing pupils. UNESCO cannot be everywhere at once and national governments in under-developed areas frequently face tasks beyond their material means. Yet it is often the lack of equipment as simple as a blackboard or a box of pencils, a wall-chart or a piece of chalk that prevents some of these children from beginning to learn.

It is because the tiniest gift may often span the gap between ignorance and school, between disease and a healthy life, between unemployment and skilled craftsmanship that UNESCO established the Gift Coupon Programme.

This has permitted individual assistance to all forms of educational institutions and training centres all over the world. Essential equipment has thus been supplied to the Sirs-el-Layyan fundamental education center in Egypt and the Patzcuaro fundamental education center in Mexico. Crippled children in Bombay have an occupational therapy center equipped entirely out of Gift Coupons which have also supplied valuable materials to the Munich Youth Library. These are only a few of over 150 projects in 45 countries.

But the programme also fulfils another need; it provides a means whereby the ordinary citizens can play a part in the work of the organization he has helped to create. It is said that an individual who has nothing to do for his country in the course of time ceases to care for it; the same applies to ideals. The idea of international understanding, which has survived much adversity, is being spread daily by new methods of communicating knowledge; among those who give it most concrete expression are the people in different countries who are co-operating actively through the Gift Coupon Programme.

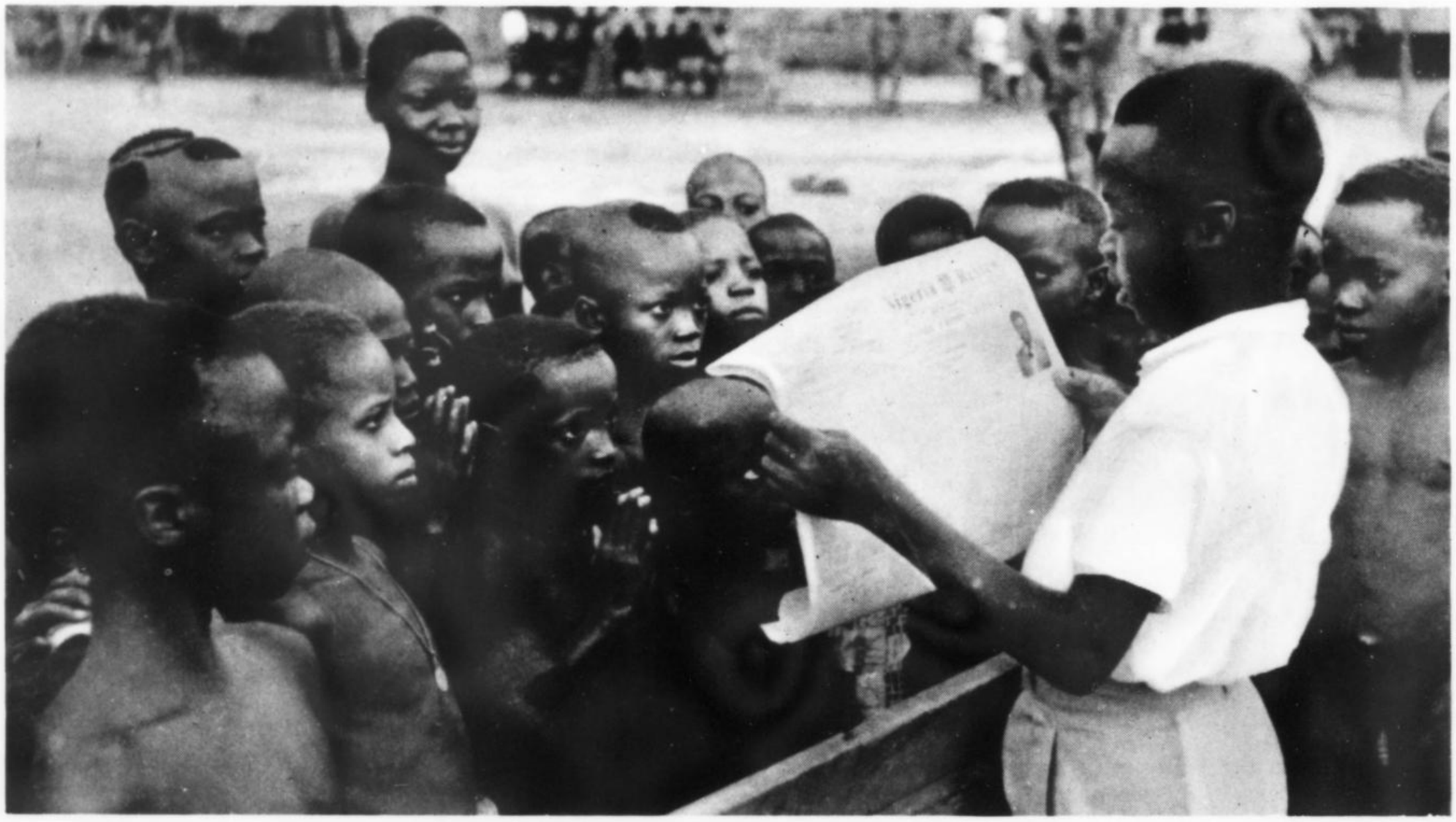
NIGERIA. New generations will know the pride of reading.

MEXICO. Outdoor movie brings in new world at Patzcuaro.

EGYPT. Clean habits are no laughing matter for this tot.

Thousands of classes

Unesco's Gift Coupon Plan is one way to help extend the right to education where the need for educational equipment is great. The programme also helps to develop relationships of mutual interest and concern among people in countries participating. Thousands of classes in Africa, Latin America, the Middle East, Asia, are now made possible by contributions from distant friends.



CAMEROONS. The big broad smile is also for tomorrow.

Half the People of the World

HALF THE PEOPLE OF THE WORLD
More than half the people of the world want to learn how to read and write; how to fight disease, how to grow more food on their land; how to make a better life for themselves and their children. Today both young and old in many parts of the world are finding opportunity to do so through Unesco Gift Coupons.

1. Farmers learn to protect poultry from disease at rural education course in Egypt. **2-3-4.** Mexican family learn of the advantages of a home-built high stove from wall poster produced at Unesco's Patzcuaro Fundamental Education Centre. With this hand-built press the Centre produces cheap but effective posters and other materials. Gift Coupon programme provides means whereby individuals in all countries may help to equip Patzcuaro with needed educational materials such as this press. **5.** Vocational training fits these Greek boys for modern life. Training in new techniques plays vital role in underdeveloped areas and is often provided through Unesco Gift Coupons. (Unesco photos)

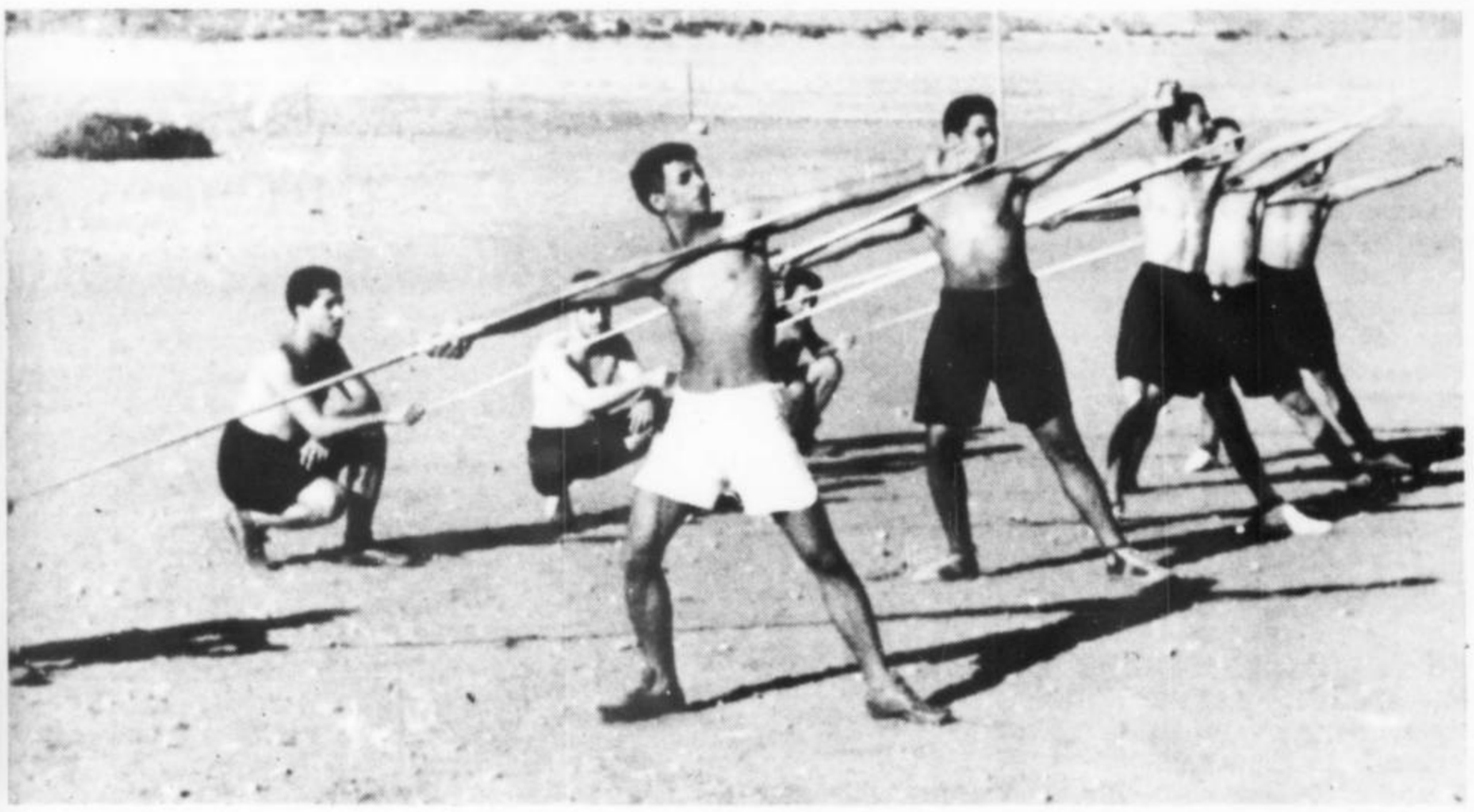
★Unesco in pictures★

U.N. competition makes multi-coloured carpet

TWO THOUSAND DESIGNS recently filled a large conference hall in Unesco House, Paris. They were spread on the floor like a gay, multi-coloured carpet (above), for there was not enough wall space to take them all. They were entries in a United Nations Day poster design contest organized by the French liaison committee of non-governmental organizations and the French United Nations Association, and open to all French schoolchildren between the ages of eleven and eighteen. A jury of experts selected 200 designs for exhibition in Unesco House. Of these, fifty were awarded prizes or commendations and are being sent to U.N. headquarters in New York. Below, left, poster by Yves Morillon aged 15 of Paris, winner of the U.N. prize, and (right) that of Odette Dumont, aged 13, of Montrouge, Seine winner of the Unesco Prize. (Unesco photos).

Welcome visitors in an Indian village

At Yelwal, in Mysore, India, Unesco trains students from many parts of the world for international work in fundamental education. Photo (far right) shows a social science team being welcomed at a small village where it carried out a social survey of the people, their numbers, needs and the pattern of their life. Friendly personal contact and the accumulated knowledge and experience from all countries—these are the foundations on which fundamental education programmes are built. When the village education programme began a member of the Unesco Centre's literacy team recited prayers with the villagers. These prayers were later written on blackboards and posters and printed in booklets —and the villagers read them for the first time. (Unesco photos).



Javelin lessons in the desert

Physical education has been given a big boost in Libyan schools since teachers attended special courses organized by Unesco's ten-man technical assistance mission to Libya. Here, with their javelins at the ready, are some of the teachers who attended one of the physical training courses. Libyan teachers gave up their summer holidays to learn these and other new lessons from members of the Unesco mission which has been helping the Libyan Government to improve teacher training facilities and text book production. A special course in arts and crafts was run by an expert in manual education. Far left, some of his teacher-students put finishing touches to models of improved village layouts. (Unesco photos)

Young 'Unescans' of New York City

Twelve hundred members of New York's High School Unesco Council, which is composed of Unesco Clubs throughout the city, recently visited United Nations headquarters for studies and discussions on the United Nations and Unesco. The visit was made during the Council's Fourth Annual Conference. Gathering in the U. N. General Assembly Hall, the students (left) heard talks by Andrew W. Cordier, Executive Assistant to the U.N. Secretary-General; Dr. Solomon V. Arnaldo, Director of Unesco's New York Office, and Mr. Richard Pederson, Adviser on Economic and Social Affairs at the United States Mission to the U.N. Right, students listening to Dr. Arnaldo in U. N. Assembly Hall. (U. N. Photos)

From the Unesco Newsroom

PAUSE FOR THOUGHT: Travellers who usually hurry through one of Paris's largest railway stations nowadays stop to take a look at an exhibition which tells the story of man's long fight for human rights. Organized by the French National Commission for Unesco, the exhibition stresses one particular article in the Universal Declaration of Human Rights, adopted by the U.N. General Assembly in 1948 — Article 13 which deals with the right to travel freely. The exhibition will eventually move to other French railway stations.

★ **ISOTOPE TRAINING:** *The first radio-isotope research and training centre in the Middle East will shortly begin operations in Cairo. The Egyptian Government announces that teams of Egyptian doctors, physicists, chemists and other scientists will study radio-activity problems in U.S. universities and then return to work at the Cairo centre.*

'EUROPEAN' HIGH SCHOOL: The first "European" secondary school is now operating in Luxembourg on the principle of "five nationalities —Belgian, Dutch, French, German and Italian—four languages and one teaching method." Altogether, in the new school, in a primary school opened a year ago, and in a kindergarten, a community of 225 children now receive a common education in four different languages.

★ **ART ON TOUR:** *Prints of works by Japanese artists, many of which have never been shown outside Japan before, are now being seen by people in twenty countries through Unesco Travelling Exhibitions. Twenty sets of one hundred prints, representing the work of Japanese artists from the 17th to the 19th centuries, were offered by Unesco to its member states. A new Unesco Travelling Exhibition of colour reproductions of Chinese paintings is now also starting on a world tour.* (See Unesco Courier, No. 1, Vol. 8, 1955.)

AID FROM NORWAY: Seventy-two Norwegian specialists now work in various parts of the world under the U.N. Technical Assistance Programme, and others are employed at Travancore, India, under Norway's own India Aid Programme. In addition, 244 students from underdeveloped countries have studied in Norway under U.N. Fellowships. This year, Norway intends to raise its U.N. Technical Assistance contribution sharply—probably donating four times the money it gave last year.

★ **INDIA'S NEW INDUSTRY:** *India's first newsprint factory recently started production at Nepa Nagar in the State of Madhya Predesh. It will shortly be producing* 100 *tons of newsprint a day—one third of the country's newsprint requirements. Though it is using imported chemical pulp at the start of production, the factory's own chemical section will be ready before the end of the year.*

HOW OTHERS LIVE: Swiss master bakers, Italian fishery workers, Danish taxi-drivers, German postal employees, Swedish printers and people holding many other different jobs in 17 countries will be packing their bags during the next few months and setting off on Unesco study tours to see how their opposite numbers in other countries live and work. Altogether some 1,200 workers will benefit from the 1955 study tours sponsored by Unesco which help to open international travel to many people whose budgets would otherwise keep them at home. Unesco is paying the travel expenses of 68 groups of from 10 to 25 persons while the people concerned and their organizations meet other expenses. Since 1952, 139 workers' groups numbering 3,270 travellers have taken part in Unesco study tours.

★ **ATOMS FOR PEACE:** *Demonstrations by an operating atomic reactor will be given at the forthcoming U.N. International Atoms for Peace Conference. The Conference meets in Geneva in August and will bring together scientific leaders from all parts of the world in search of fuller peaceful applications of nuclear energy. Demonstrations of the reactor, which will be built in the United States, will enable scientists and technicians at the meeting to observe some of its research possibilities. They will be able to operate the controls to start and stop nuclear chain reactions. From a small platform on top of the reactor a lecturer will direct the demonstrations and explain the reactor's operations to the general public attending the Geneva Conference.* (See special issue of the Unesco Courier, "The Promise of Atomic Power", No. 12, Volume 7, 1954.)

GOING TO TOWN: Just as city-bred children benefit physically from country holidays, so those from rural areas can gain educationally from visits to cities. In Poland, during the past three years, educational authorities have helped more than 100,000 country children to spend their holidays visiting historical monuments, theatres, art galleries and other places of interest in Polish cities. Last year, eight holiday centres in the chief towns were opened for these children.

★ **COLLECTED CLASSICS:** *Two of Latin America's great classics have just been translated into French and added to Unesco's "Collection of Representative Works". One is Gabriel René Moreno's "The Last Days of the High Peru Colony"—a 19th century history of the region that is now Bolivia. The other, "Tabaré", by Uruguay's famous poet, Juan Zorilla de San Martin, is an epic poem which helped the growth of a national sentiment among the Uruguayan people. Unesco's collection of translations from the world's classics now numbers twenty-one.*

UNESCO'S STAMP: The United Nations is issuing its second commemorative stamp of 1955 to honour the work of UNESCO. Designed by George Hamori of Israel, the stamp shows the agency's symbol, a Doric temple whose pillars are formed by the letters U-N-E-S-C-O. The stamp will be printed in three and eight cent denominations, and will be on sale to collectors only in Europe.

★ **FISHING FLEET FOR KOREA:** *Almost the entire Korean fishing fleet was destroyed during the recent war, depriving the country of an important source of income and food. One of the projects undertaken by the United Nations Korean Reconstruction Agency is to rebuild the fleet at a cost of* $ 3,500,000. *Today shipyards all over the country are participating in the building programme. The first five fishing boats were launched in Pusan in January* 1955.

New UNESCO Monthly Replaces Quarterly Bulletin

Announcing the UNESCO CHRONICLE, *a new monthly magazine replacing the* Unesco Quarterly Bulletin *and the* Unesco Newsletter, *and combining editorial features of both*

In a new format the editorial formula of the UNESCO CHRONICLE includes, besides reports on Unesco activities at the international and regional levels, a monthly letter to Member States, and a review of administrative matters at headquarters. Also included is a review of work being carried on in the field and an editorial on some special aspect of Unesco's Programme. The first editorial deals with increased direct aid to Member States.

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The UNESCO Courier
A WINDOW OPEN ON THE WORLD

MIRROR OF HEALTH

This year, World Health Day slogan is "Clean Water Means Better Health". Here, boys in French Cameroons, Equatorial Africa, splash happily under new school shower and shun disease-infested swimming hole. See page 18.
(WHO Photo by Pierre Pittet).